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AIR QUALITY DATA FOR METALS 1968 AND 1969 FROM THE NATIONAL AIR SURVEILLANCE NETWORKS

Environmental Protection Agency
Research Triangle Park, North Carolina

June 1973

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Particulate pollutant data gathered during 1968 and 1969 by the cooperating stations of the National Air Surveillance Networks provide the basis for listing the urban and nonurban concentrations of 12 metallic components of suspended particulate matter. The data are presented as cumulative frequency distributions, including the number of valid samples taken, the minimum value, the maximum value, the arithmetic mean, the geometric mean, and the standard deviation or as a composite concentration value for each site for each of the four quarters of the calendar year; a yearly average is reported whenever valid data for all four quarters are obtained.

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1968 AND 1969

from the
National Air Surveillance Networks

ENVIRONMENTAL PROTECTION AGENCY
Office of Air and Water Programs
Office of Air Quality Planning and Standards
Research Triangle Park, North Carolina 27711

June 1973

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PREFACE

The Quality Assurance and Environmental Monitoring Laboratory of the National Environmental Research Center-Research Triangle Park, with the assistance and cooperation of state and local agencies, conducts a variety of air sampling activities to obtain information about the air quality in the United States. Data from independent state and local sampling networks that have contributed their results to the National Aerometric Data Bank are available from the Monitoring and Data Analysis Division, Office of Air and Water Programs. The data reported are for metal components of particulate matter.

Updated listings for this notebook will be provided as more current data are available. Any subsequent changes in the introductory material (site descriptions, data table presentations, laboratory methodology, etc.) made by EPA will be forwarded on a routine basis.

ACKNOWLEDGMENTS

The data reported in this publication could not have been gathered without the generous cooperation of the many state and local air pollution control agencies in the operation of the NASN stations. Gratitude is also due the agencies that have participated in this operation.

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ABSTRACT

Particulate pollutant data gathered during 1968 and 1969 by the cooperating stations of the National Air Surveillance Networks provide the basis for listing the urban and nonurban concentrations of 12 metallic components of suspended particulate matter.

The data are presented as cumulative frequency distributions, including the number of valid samples taken, the minimum value, the maximum value, the arithmetic mean, the geometric mean, and the standard deviation or as a composite concentration value for each site for each of the four quarters of the calendar year; a yearly average is reported whenever valid data for all four quarters are obtained.

A previous EPA publication, APTD-0978, lists metal components of suspended particulate matter collected during 1966 and 1967.

AIR QUALITY DATA FOR METALS
1968 AND 1969

SECTION 1. INTRODUCTION

The Environmental Protection Agency (EPA), with the assistance and cooperation of state and local agencies, conducts a variety of air sampling activities to obtain information about the air quality in the United States. EPA generally provides the equipment, supplies, and laboratory analytical services; the cooperating agency provides the sampling site and the manpower. In addition to assisting in the operation of the EPA sampling network, many state and local air pollution control agencies operate their own air pollution control programs. Many such agencies contribute their data to EPA's aerometric data bank, and these data are included in other EPA publications. Data on the concentrations of 12 metals, beryllium, cadmium, chromium, cobalt, copper, iron, lead, manganese, nickel, tin, titanium, and vanadium, present in suspended particulate matter collected at urban and nonurban sampling sites during 1968 and 1969 are included in this publication.

SAMPLING LOCATIONS

The monitoring sites are divided into two groups, urban sites located within a city or town or its suburban environs and nonurban sites located in rural or remote areas, in order to provide an indication of background levels of metals. Within each section the data are arranged by year, then by urban and nonurban sites for that specific year.

Each monitoring site is assigned a unique code number. Details of site coding and a list of codes already assigned are found in the SAROAD Station Coding Manual.[1] Briefly, each twelve-digit site identification number is assigned as follows: the first two digits identify the state; the next four digits identify a city of at least 2500 persons, or a county (in some states, the corresponding jurisdiction is a parish, election district, or regional planning district); and the next three digits designate a specific address where the sampling equipment is operated. For example, 010380001 A01 refers to state 01 (Alabama), city 0380 (Birmingham), and site 001 (619 South 19th Street). The final three characters (A01) designate the agency project code. Some of the principal agency project codes are:

A01	EPA, population-oriented surveillance
A03	EPA, background surveillance
F01	State agency, population-oriented surveillance
G01	County agency, population-oriented surveillance
H01	City agency, population-oriented surveillance

A list of sampling site addresses is available in a separate publication.[2]

SAMPLING SCHEDULES

National Air Surveillance Networks (NASN) data originate from a bi-weekly (26 samples per year) modified random sampling schedule. The schedule is modified to ensure equal representation of each day of the week.

DESCRIPTION OF DATA TABLES

The basic formats of data presentation are described. The first method of data presentation is the cumulative frequency distribution table. For each site, these tables list the year of sampling and the number of valid samples taken. The minimum value, the nine decile values, the maximum value, the arithmetic mean, and the geometric mean are expressed in micrograms or nanograms per cubic meter. The standard deviation is also given. Standard temperature was 25° Centigrade and standard pressure was 760 mm mercury.

The second method of data presentation is the quarterly composite table. For each site, an average concentration value is reported for each of the four quarters of the calendar year. Composite and average values are in micrograms (nanograms in the case of beryllium) per cubic meter. Standard temperature was 25° Centigrade and standard pressure was 760 mm mercury.

Data are judged to be representative and are included in the tables if there are at least five valid samples per quarter and 20 valid samples per year at each site. Furthermore, if no valid samples are reported in one month of a quarter, neither of the other two months in that quarter may have less than two valid samples if data for that quarter are to be reported. When "zero" concentrations--values below the minimum detectable limit--are reported (shown as 0.0 in the data tables), the means and the standard deviations are calculated by replacing the zeroes with a value approximately equal to one-half the minimum detectable limit. In order to permit consistency from year to year, the values substituted for zeroes on any particular parameter stay the same even though the minimum detectable limit might change. When more than 25 percent, but less than 50 percent, of the values are below the detectable limit, frequency distributions are given but no statistics are calculated. If more than 50 percent of the values are below the limit, the data are too sparse for any summarization and the frequency distribution is replaced with the following statement, "No. of samples ( ) below the minimum detectable exceeds 50%," and only the maximum sample concentration is listed.

Table 1-1 lists the minimum detectable concentrations, urban and nonurban, for the 12 metals reported.

REFERENCES

1. Fair, D.H. SAROAD Station Coding Manual. U.S. Environmental Protection Agency, Office of Air Programs. Research Triangle Park, North Carolina. Publication No. APTD-0907. February 1972.
2. Directory of Air Quality Monitoring Sites, 1971. U.S. Environmental Protection Agency, Office of Air Programs. Research Triangle Park, North Carolina. Publication No. APTD-0979. April 1972.

Table 1-1. URBAN AND NONURBAN DETECTABLE CONCENTRATIONS FOR METALS, $\mu g/m^3$

Metal	Detectable concentration	
	Urban	Nonurban
Beryllium	0.0002	0.00007
Cadmium	0.002	0.0006
Chromium	0.006	0.002
Cobalt	0.004	0.0001
Copper	0.01	0.003
Iron	0.10	0.03
Lead	0.02	0.004
Manganese	0.02	0.01
Nickel	0.005	0.002
Tin	0.001	0.0003
Titanium	0.01	0.003
Vanadium	0.003	0.001

SECTION 2. LABORATORY METHODS

SUSPENDED PARTICULATE MATTER

The mass of particulate matter per volume of air is usually determined by drawing air through a pre-weighed glass filter with a high-volume (Hi-Vol) air sampler and then weighing the soiled filter. A calibrated rotameter is read at the start and finish of the sampling period, and the averaged value is used with a calibration table for that rotameter to obtain the flow rate. The known sampling period (24 hours) and the measured flow rate allow for calculation of the volume of air sampled. The following procedure is used by EPA for all sampling conducted by NASN.

The Hi-Vol samplers, operating at approximately 1.5 cubic meters per minute, collect particulate matter from about 2200 cubic meters of air during the 24-hour sampling period. The filters used are 8- by 10-inch flash-fired glass-fiber filters selected for low and uniform background concentrations of those substances to be measured.

To eliminate any filters having pinholes or other flaws that could affect air flow, the filters are screened for imperfections on a light table and numbered. Prior to weighing, they are equilibrated for a minimum of 24 hours at a temperature of 24° Centigrade and a relative humidity of 50 percent or less. Because any crease in a filter can seriously affect the air flow, filters are weighed with a balance that permits weighing without bending.

The filters are then distributed unfolded to the cooperating local agencies. After sampling, the filters are folded in half with the collected particulate matter inside and returned to the laboratory. The filter with the collected particulates is again equilibrated for at least 24 hours at a temperature of 24° Centigrade and a relative humidity of 50 percent or less, and then weighed to determine the amount of particulate matter that was collected.

METALS

In the analysis for metals, a 2.5 by 18.0 centimeter strip of an urban sample or a 5.0 by 18.0 centimeter strip of a nonurban sample is used. The strips are ashed in a low-temperature oxygen-plasma furnace (approximately 150° Centigrade) to burn off organic material. The metals are then extracted by refluxing for 3 hours with a mixture of nitric and hydrochloric acids.

Quantitative analysis is accomplished by measuring the intensity of the emission line (or lines) for each metal when the sample is excited in an optical emission spectrograph, and by then comparing these measurements with a calibration curve obtained with standard concentrations. The emission spectrograph provides a general overview (semi-quantitative) of the metals concentrations. However, as used, it is not considered to be as accurate or precise a method as a specific determination method for a single element, such as the determination of zinc by atomic absorption, would be. The emission spectrograph method, however, does indicate the relative order and the general level of metals concentrations occurring in various urban and nonurban areas of the United States.

Data for samples collected prior to 1966 may not be directly comparable to the results presented in this report because samples taken from 1957 through 1966 were ashed in a muffle furnace at 500° Centigrade, causing the loss of varying amounts of the elements. This deficiency has been corrected by ashing in a low-temperature asher at about 150° Centigrade.

SECTION 3. URBAN AND NONURBAN METALS IN SUSPENDED PARTICULATES: BERYLLIUM

Table 3-1. BERYLLIUM, URBAN FREQUENCY DISTRIBUTIONS, 1968

(ng/m^3)

LOCATION	NO. SAMP.	MIN.	FREQUENCY DISTRIBUTION, %									MAX.	ARITHMETIC		GEOMETRIC	
			10	20	30	40	50	60	70	80	90		MEAN	STD. DEV.	MEAN	STD. DEV.
ALABAMA																
GADSDEN																
011480001 A01	25	0.0	NO. OF SAMPLES (24) BELOW MIN. DET. EXCEEDS 50%									0.7				
HUNTSVILLE																
011860001 A01	26	0.0	NO. OF SAMPLES (25) BELOW MIN. DET. EXCEEDS 50%									1.0				
MOBILE																
012380001 A01	25	0.0	NO. OF SAMPLES (25) BELOW MIN. DET. EXCEEDS 50%									0.0				
MONTGOMERY																
012460001 A01	26	0.0	NO. OF SAMPLES (26) BELOW MIN. DET. EXCEEDS 50%									0.0				
ALASKA																
ANCHORAGE																
020040003 A01	26	0.0	NO. OF SAMPLES (26) BELOW MIN. DET. EXCEEDS 50%									0.0				
FAIRBANKS																
020160001 A01	23	0.0	NO. OF SAMPLES (19) BELOW MIN. DET. EXCEEDS 50%									1.3				
ARIZONA																
MARICOPA CO																
030440001 A01	25	0.0	NO. OF SAMPLES (23) BELOW MIN. DET. EXCEEDS 50%									0.6				
PHOENIX																
030600002 A01	26	0.0	NO. OF SAMPLES (26) BELOW MIN. DET. EXCEEDS 50%									0.0				
TUCSON																
030860001 A01	26	0.0	NO. OF SAMPLES (26) BELOW MIN. DET. EXCEEDS 50%									0.0				
ARKANSAS																
LITTLE ROCK																
041440001 A01	25	0.0	NO. OF SAMPLES (25) BELOW MIN. DET. EXCEEDS 50%									0.0				
TEXARKANA																
042560001 A01	25	0.0	NO. OF SAMPLES (24) BELOW MIN. DET. EXCEEDS 50%									0.6				
WEST MEMPHIS																
042740001 A01	26	0.0	NO. OF SAMPLES (26) BELOW MIN. DET. EXCEEDS 50%									0.0				
CALIFORNIA																
BURBANK																
050900001 A01	26	0.0	NO. OF SAMPLES (26) BELOW MIN. DET. EXCEEDS 50%									0.0				
GLENDALE																
052940001 A01	25	0.0	NO. OF SAMPLES (25) BELOW MIN. DET. EXCEEDS 50%									0.0				
LONG BEACH																
054100001 A01	26	0.0	NO. OF SAMPLES (26) BELOW MIN. DET. EXCEEDS 50%									0.0				
LOS ANGELES																
054180001 A01	26	0.0	NO. OF SAMPLES (26) BELOW MIN. DET. EXCEEDS 50%									0.0				
OAKLAND																
055300001 A01	25	0.0	NO. OF SAMPLES (25) BELOW MIN. DET. EXCEEDS 50%									0.0				
ONTARIO																
055380001 A01	24	0.0	NO. OF SAMPLES (24) BELOW MIN. DET. EXCEEDS 50%									[illegible]				
PASADENA																
055760001 A01	25	0.0	NO. OF SAMPLES (25) BELOW MIN. DET. EXCEEDS 50%									[illegible]				
RIVERSIDE																
056400001 A01	26	0.0	NO. OF SAMPLES (25) BELOW MIN. DET. EXCEEDS 50%									0.5				
SACRAMENTO																
056580001 A01	26	0.0	NO. OF SAMPLES (26) BELOW MIN. DET. EXCEEDS 50%									[illegible]				
SAN BERNARDINO																
056680001 A01	26	0.0	NO. OF SAMPLES (26) BELOW MIN. DET. EXCEEDS 50%									0.0				
SAN DIEGO																
056800001 A01	26	0.0	NO. OF SAMPLES (26) BELOW MIN. DET. EXCEEDS 50%									0.0				
SAN FRANCISCO																
056860001 A01	26	0.0	NO. OF SAMPLES (26) BELOW MIN. DET. EXCEEDS 50%									[illegible]				
COLORADO																
DENVER																
060580001 A01	24	0.0	NO. OF SAMPLES (24) BELOW MIN. DET. EXCEEDS 50%									0.0				
CONNECTICUT																
HARTFORD																
070420001 A01	26	0.0	NO. OF SAMPLES (22) BELOW MIN. DET. EXCEEDS 50%									0.7				
NEW HAVEN																
070700001 A01	26	0.0	NO. OF SAMPLES (26) BELOW MIN. DET. EXCEEDS 50%									[illegible]				
DELAWARE																
NEWARK																
080140001 A01	24	0.0	NO. OF SAMPLES (24) BELOW MIN. DET. EXCEEDS 50%									0.0				
WILMINGTON																
080260001 A01	23	0.0	NO. OF SAMPLES (23) BELOW MIN. DET. EXCEEDS 50%									[illegible]				

Table 3-1 (continued). BERYLLIUM, URBAN FREQUENCY DISTRIBUTIONS, 1968

(ng/m^3)

LOCATION	NO. SAMP.	MIN.	FREQUENCY DISTRIBUTION, %									MAX.	ARITHMETIC		GEOMETRIC	
			10	20	30	40	50	60	70	80	90		MEAN	STD. DEV.	MEAN	STD. DEV.
DIST COLUMBIA																
WASHINGTON																
090020001 A01	26	0.0	NO. OF SAMPLES			26) BELOW MIN. DET.			EXCEEDS 50%			0.0				
FLORIDA																
JACKSONVILLE																
101960002 A01	25	0.0	NO. OF SAMPLES			25) BELOW MIN. DET.			EXCEEDS 50%			0.0				
FLORIDA																
TAMPA																
104360002 A01	23	0.0	NO. OF SAMPLES			23) BELOW MIN. DET.			EXCEEDS 50%			0.0				
GEORGIA																
ATLANTA																
110230001 A01	26	0.0	NO. OF SAMPLES			26) BELOW MIN. DET.			EXCEEDS 50%			0.0				
HAWAII																
HONOLULU																
120120001 A01	26	0.0	NO. OF SAMPLES			26) BELOW MIN. DET.			EXCEEDS 50%			0.0				
IDAHO																
BOISE CITY																
130220001 A01	26	0.0	NO. OF SAMPLES			25) BELOW MIN. DET.			EXCEEDS 50%			1.2				
ILLINOIS																
CHICAGO																
141220001 A01	25	0.0	NO. OF SAMPLES			22) BELOW MIN. DET.			EXCEEDS 50%			0.5				
EAST ST LOUIS																
142120001 A01	25	0.0	NO. OF SAMPLES			25) BELOW MIN. DET.			EXCEEDS 50%			0.0				
JOLIET																
143760001 A01	21	0.0	NO. OF SAMPLES			20) BELOW MIN. DET.			EXCEEDS 50%			0.4				
ROCKFORD																
146680001 A01	25	0.0	NO. OF SAMPLES			23) BELOW MIN. DET.			EXCEEDS 50%			0.5				
SPRINGFIELD																
147280001 A01	23	0.0	NO. OF SAMPLES			23) BELOW MIN. DET.			EXCEEDS 50%			0.0				
INDIANA																
EAST CHICAGO																
151180001 A01	26	0.0	0.0	0.0	0.0	0.3	0.4	0.5	0.7	0.8	1.3	3.2				
HAMMOND																
151780001 A01	26	0.0	NO. OF SAMPLES			21) BELOW MIN. DET.			EXCEEDS 50%			0.5				
INDIANAPOLIS																
152040001 A01	25	0.0	NO. OF SAMPLES			19) BELOW MIN. DET.			EXCEEDS 50%			0.7				
SOUTH BEND																
153880001 A01	24	0.0	NO. OF SAMPLES			23) BELOW MIN. DET.			EXCEEDS 50%			0.6				
IOWA																
CEDAR RAPIDS																
160640001 A01	26	0.0	NO. OF SAMPLES			26) BELOW MIN. DET.			EXCEEDS 50%			0.0				
DES MOINES																
161180001 A01	26	0.0	NO. OF SAMPLES			23) BELOW MIN. DET.			EXCEEDS 50%			0.8				
DUBUQUE																
161260001 A01	23	0.0	NO. OF SAMPLES			23) BELOW MIN. DET.			EXCEEDS 50%			0.0				
KANSAS																
KANSAS CITY																
171800001 A01	25	0.0	NO. OF SAMPLES			25) BELOW MIN. DET.			EXCEEDS 50%			0.0				
TOPEKA																
173560001 A01	26	0.0	NO. OF SAMPLES			26) BELOW MIN. DET.			EXCEEDS 50%			0.0				
WICHITA																
173740001 A01	25	0.0	NO. OF SAMPLES			25) BELOW MIN. DET.			EXCEEDS 50%			0.0				
KENTUCKY																
ASHLAND																
180080002 A01	23	0.0	NO. OF SAMPLES			20) BELOW MIN. DET.			EXCEEDS 50%			0.8				
COVINGTON																
180890001 A01	25	0.0	NO. OF SAMPLES			21) BELOW MIN. DET.			EXCEEDS 50%			1.3				
LEXINGTON																
182300001 A01	24	0.0	NO. OF SAMPLES			23) BELOW MIN. DET.			EXCEEDS 50%			0.4				
LOUISVILLE																
182380001 A01	25	0.0	NO. OF SAMPLES			19) BELOW MIN. DET.			EXCEEDS 50%			3.6				
LOUISIANA																
NEW ORLEANS																
192020002 A01	25	0.0	NO. OF SAMPLES			24) BELOW MIN. DET.			EXCEEDS 50%			0.9				
MAINE																
PORTLAND																
200960002 A01	21	0.0	NO. OF SAMPLES			21) BELOW MIN. DET.			EXCEEDS 50%			0.0				
MARYLAND																
BALTIMORE																
210120001 A01	26	0.0	NO. OF SAMPLES			26) BELOW MIN. DET.			EXCEEDS 50%			0.0				

Table 3-1 (continued). BERYLLIUM, URBAN FREQUENCY DISTRIBUTIONS, 1968

(ng/m^3)

LOCATION	NO. SAMP.	MIN.	FREQUENCY DISTRIBUTION, %									MAX.	ARITHMETIC		GEOMETRIC	
			10	20	30	40	50	60	70	80	90		MEAN	STD. DEV.	MEAN	STD. DEV.
MASSACHUSETTS																
BOSTON																
220240001 A01	25	0.0	NO. OF SAMPLES (25) BELOW MIN. DET. EXCEEDS 50%									0.0				
WORCHESTER																
222640001 A01	24	0.0	NO. OF SAMPLES (24) BELOW MIN. DET. EXCEEDS 50%									0.0				
MICHIGAN																
DETROIT																
231180001 A01	26	0.0	0.0	0.4	0.5	0.6	0.7	0.8	1.0	1.1	1.4	1.8	0.8	0.46	0.6	2.37
FLINT																
231580001 A01	26	0.0	NO. OF SAMPLES (26) BELOW MIN. DET. EXCEEDS 50%									0.0				
GRAND RAPIDS																
231820001 A01	26	0.0	NO. OF SAMPLES (26) BELOW MIN. DET. EXCEEDS 50%									0.0				
TRENTON																
235120001 A01	25	0.0	NO. OF SAMPLES (21) BELOW MIN. DET. EXCEEDS 50%									0.5				
MINNESOTA																
DULUTH																
241040001 A01	23	0.0	NO. OF SAMPLES (21) BELOW MIN. DET. EXCEEDS 50%									0.6				
MINNEAPOLIS																
242260001 A01	26	0.0	NO. OF SAMPLES (24) BELOW MIN. DET. EXCEEDS 50%									0.5				
MOORHEAD																
242320001 A01	26	0.0	NO. OF SAMPLES (25) BELOW MIN. DET. EXCEEDS 50%									0.5				
ST PAUL																
243300001 A01	26	0.0	NO. OF SAMPLES (24) BELOW MIN. DET. EXCEEDS 50%									0.7				
MISSISSIPPI																
JACKSON																
251260002 A01	26	0.0	NO. OF SAMPLES (26) BELOW MIN. DET. EXCEEDS 50%									0.0				
MISSOURI																
KANSAS CITY																
262380001 A01	24	0.0	NO. OF SAMPLES (21) BELOW MIN. DET. EXCEEDS 50%									1.2				
MONTANA																
HELENA																
270720001 A01	24	0.0	NO. OF SAMPLES (24) BELOW MIN. DET. EXCEEDS 50%									0.0				
NEBRASKA																
OMAHA																
281880001 A01	25	0.0	NO. OF SAMPLES (25) BELOW MIN. DET. EXCEEDS 50%									0.0				
NEVADA																
LAS VEGAS																
290320001 A01	24	0.0	NO. OF SAMPLES (23) BELOW MIN. DET. EXCEEDS 50%									0.4				
RENO																
290480001 A01	25	0.0	NO. OF SAMPLES (25) BELOW MIN. DET. EXCEEDS 50%									0.0				
NEW HAMPSHIRE																
CONCORD																
300120001 A01	25	0.0	NO. OF SAMPLES (25) BELOW MIN. DET. EXCEEDS 50%									0.0				
NEW JERSEY																
BAYONNE																
310180001 A01	21	0.0	NO. OF SAMPLES (20) BELOW MIN. DET. EXCEEDS 50%									0.3				
BURLINGTON CO																
310660002 A01	25	0.0	NO. OF SAMPLES (23) BELOW MIN. DET. EXCEEDS 50%									0.4				
CAMDEN																
310720001 A01	26	0.0	NO. OF SAMPLES (24) BELOW MIN. DET. EXCEEDS 50%									0.4				
GLASSBORO																
311700001 A01	25	0.0	NO. OF SAMPLES (23) BELOW MIN. DET. EXCEEDS 50%									0.5				
HAMILTON																
311940001 A01	21	0.0	NO. OF SAMPLES (21) BELOW MIN. DET. EXCEEDS 50%									0.0				
JERSEY CITY																
312320001 A01	25	0.0	NO. OF SAMPLES (21) BELOW MIN. DET. EXCEEDS 50%									0.5				
NEWARK																
313480001 A01	24	0.0	NO. OF SAMPLES (21) BELOW MIN. DET. EXCEEDS 50%									0.5				
PATERSON																
314140001 A01	25	0.0	NO. OF SAMPLES (25) BELOW MIN. DET. EXCEEDS 50%									0.0				
PERTH AMBOY																
314220001 A01	26	0.0	NO. OF SAMPLES (25) BELOW MIN. DET. EXCEEDS 50%									0.4				
TRENTON																
315400001 A01	24	0.0	NO. OF SAMPLES (24) BELOW MIN. DET. EXCEEDS 50%									0.0				
NEW MEXICO																
ALBUQUERQUE																
320040001 A01	24	0.0	NO. OF SAMPLES (24) BELOW MIN. DET. EXCEEDS 50%									0.0				

Table 3-1 (continued). BERYLLIUM, URBAN FREQUENCY DISTRIBUTIONS, 1968

(ng/m^3)

LOCATION	NO. SAMP.	MIN.	FREQUENCY DISTRIBUTION, %									MAX.	ARITHMETIC		GEOMETRIC	
			10	20	30	40	50	60	70	80	90		MEAN	STD. DEV.	MEAN	STD. DEV.
NORTH CAROLINA																
CHARLOTTE																
340700001 A01	25	0.0	NO. OF SAMPLES (22) BELOW MIN. DET. EXCEEDS 50%									0.7				
DURHAM																
341160001 A01	23	0.0	NO. OF SAMPLES (22) BELOW MIN. DET. EXCEEDS 50%									0.6				
NORTH DAKOTA																
BISMARCK																
350100001 A01	25	0.0	NO. OF SAMPLES (25) BELOW MIN. DET. EXCEEDS 50%									0.0				
OHIO																
AKRON																
360060001 A01	25	0.0	NO. OF SAMPLES (17) BELOW MIN. DET. EXCEEDS 50%									0.9				
CINCINNATI																
361220001 A01	26	0.0	NO. OF SAMPLES (26) BELOW MIN. DET. EXCEEDS 50%									0.0				
CLEVELAND																
361300001 A01	26	0.0	NO. OF SAMPLES (17) BELOW MIN. DET. EXCEEDS 50%									1.3				
COLUMBUS																
361460001 A01	24	0.0	NO. OF SAMPLES (24) BELOW MIN. DET. EXCEEDS 50%									0.0				
DAYTON																
361660001 A01	26	0.0	NO. OF SAMPLES (20) BELOW MIN. DET. EXCEEDS 50%									1.6				
TOLEDO																
366600001 A01	23	0.0	NO. OF SAMPLES (20) BELOW MIN. DET. EXCEEDS 50%									0.4				
YOUNGSTOWN																
367760001 A01	25	0.0	NO. OF SAMPLES (15) BELOW MIN. DET. EXCEEDS 50%									1.0				
OKLAHOMA																
OKLAHOMA CITY																
372200001 A01	22	0.0	NO. OF SAMPLES (19) BELOW MIN. DET. EXCEEDS 50%									0.5				
TULSA																
373000001 A01	24	0.0	NO. OF SAMPLES (18) BELOW MIN. DET. EXCEEDS 50%									0.5				
OREGON																
MEDFORD																
381160001 A01	25	0.0	NO. OF SAMPLES (23) BELOW MIN. DET. EXCEEDS 50%									0.5				
PORTLAND																
381460001 A01	26	0.0	NO. OF SAMPLES (24) BELOW MIN. DET. EXCEEDS 50%									0.5				
PENNSYLVANIA																
ALLENTOWN																
390120001 A01	26	0.0	NO. OF SAMPLES (21) BELOW MIN. DET. EXCEEDS 50%									0.4				
ALTOONA																
390140001 A01	23	0.0	NO. OF SAMPLES (23) BELOW MIN. DET. EXCEEDS 50%									0.0				
BETHLEHEM																
390780002 A01	24	0.0	NO. OF SAMPLES (24) BELOW MIN. DET. EXCEEDS 50%									0.0				
HARRISBURG																
393880001 A01	26	0.0	NO. OF SAMPLES (25) BELOW MIN. DET. EXCEEDS 50%									0.3				
HAZLETON																
393960001 A01	24	0.0	NO. OF SAMPLES (21) BELOW MIN. DET. EXCEEDS 50%									7.1				
JOHNSTOWN																
394460001 A01	23	0.0	NO. OF SAMPLES (16) BELOW MIN. DET. EXCEEDS 50%									1.2				
PHILADELPHIA																
397140001 A01	26	0.0	NO. OF SAMPLES (23) BELOW MIN. DET. EXCEEDS 50%									0.6				
PITTSBURGH																
397260001 A01	26	0.0	NO. OF SAMPLES (15) BELOW MIN. DET. EXCEEDS 50%									0.8				
READING																
397620001 A01	25	0.0	0.0	0.0	0.0	0.0	0.3	0.4	0.5	0.5	1.0	1.4				
SCRANTON																
398940001 A01	25	0.0	NO. OF SAMPLES (14) BELOW MIN. DET. EXCEEDS 50%									0.8				
WARMINSTER																
399160001 A01	25	0.0	NO. OF SAMPLES (25) BELOW MIN. DET. EXCEEDS 50%									0.0				
WEST CHESTER																
399280001 A01	24	0.0	NO. OF SAMPLES (23) BELOW MIN. DET. EXCEEDS 50%									0.3				
WILKES-BARRE																
399430001 A01	24	0.0	NO. OF SAMPLES (22) BELOW MIN. DET. EXCEEDS 50%									0.9				
YORK																
399560001 A01	25	0.0	NO. OF SAMPLES (15) BELOW MIN. DET. EXCEEDS 50%									0.8				
PUERTO RICO																
BAYAMON																
400380001 A01	25	0.0	NO. OF SAMPLES (17) BELOW MIN. DET. EXCEEDS 50%									1.0				
CATANO																
400560001 A01	25	0.0	NO. OF SAMPLES (19) BELOW MIN. DET. EXCEEDS 50%									0.6				

Table 3-1 (continued). BERYLLIUM, URBAN FREQUENCY DISTRIBUTIONS, 1968

(ng/m^3)

LOCATION	NO. SAMP.	MIN.	FREQUENCY DISTRIBUTION, % 10	20	30	40	50	60	70	80	90	MAX.	ARITHMETIC MEAN	ARITHMETIC STD. DEV.	GEOMETRIC MEAN	GEOMETRIC STD. DEV.
PUERTO RICO																
GUAYANILLA																
401380001 A01	25	0.0	NO. OF SAMPLES (24) BELOW MIN. DET. EXCEEDS 50%									0.3				
PONCE																
401920001 A01	25	0.0	NO. OF SAMPLES (25) BELOW MIN. DET. EXCEEDS 50%									0.0				
RHODE ISLAND																
EAST PROVIDENCE																
410120001 A01	26	0.0	NO. OF SAMPLES (24) BELOW MIN. DET. EXCEEDS 50%									0.3				
PROVIDENCE																
410300001 A01	25	0.0	NO. OF SAMPLES (17) BELOW MIN. DET. EXCEEDS 50%									0.4				
SOUTH CAROLINA																
COLUMBIA																
420760001 A01	24	0.0	NO. OF SAMPLES (23) BELOW MIN. DET. EXCEEDS 50%									0.5				
GREENVILLE																
421180001 A01	25	0.0	NO. OF SAMPLES (22) BELOW MIN. DET. EXCEEDS 50%									0.5				
SOUTH DAKOTA																
SIOUX FALLS																
431480001 A01	22	0.0	NO. OF SAMPLES (20) BELOW MIN. DET. EXCEEDS 50%									0.6				
TENNESSEE																
CHATTANOOGA																
440380001 A01	25	0.0	NO. OF SAMPLES (23) BELOW MIN. DET. EXCEEDS 50%									0.5				
KNOXVILLE																
441740001 A01	26	0.0	NO. OF SAMPLES (24) BELOW MIN. DET. EXCEEDS 50%									0.8				
MEMPHIS																
442340001 A01	25	0.0	NO. OF SAMPLES (24) BELOW MIN. DET. EXCEEDS 50%									0.4				
NASHVILLE																
442540001 A01	25	0.0	NO. OF SAMPLES (23) BELOW MIN. DET. EXCEEDS 50%									0.4				
TEXAS																
DALLAS																
451310002 A01	26	0.0	NO. OF SAMPLES (26) BELOW MIN. DET. EXCEEDS 50%									0.0				
HOUSTON																
452560001 A01	26	0.0	NO. OF SAMPLES (24) BELOW MIN. DET. EXCEEDS 50%									1.1				
PASADENA																
454060001 A01	26	0.0	0.0	0.0	0.0	0.0	0.5	0.6	0.8	0.8	0.9	1.2				
SAN ANTONIO																
454570001 A01	25	0.0	NO. OF SAMPLES (25) BELOW MIN. DET. EXCEEDS 50%									0.0				
UTAH																
OGDEN																
460680001 A01	25	0.0	NO. OF SAMPLES (25) BELOW MIN. DET. EXCEEDS 50%									0.0				
SALT LAKE CITY																
460920001 A01	26	0.0	NO. OF SAMPLES (24) BELOW MIN. DET. EXCEEDS 50%									0.8				
VERMONT																
BURLINGTON																
470140001 A01	24	0.0	NO. OF SAMPLES (24) BELOW MIN. DET. EXCEEDS 50%									0.0				
VIRGINIA																
DANVILLE																
480920001 A01	25	0.0	NO. OF SAMPLES (23) BELOW MIN. DET. EXCEEDS 50%									0.5				
HAMPTON																
481440001 A01	25	0.0	NO. OF SAMPLES (21) BELOW MIN. DET. EXCEEDS 50%									0.7				
LYNCHBURG																
481840001 A01	26	0.0	NO. OF SAMPLES (23) BELOW MIN. DET. EXCEEDS 50%									0.6				
NORFOLK																
482140001 A01	26	0.0	0.0	0.4	0.4	0.6	0.6	0.6	0.7	0.8	1.0	1.3	0.6	0.28	0.5	1.97
PORTSMOUTH																
482440001 A01	26	0.0	NO. OF SAMPLES (21) BELOW MIN. DET. EXCEEDS 50%									0.6				
RICHMOND																
482660001 A01	26	0.0	NO. OF SAMPLES (25) BELOW MIN. DET. EXCEEDS 50%									0.3				
ROANOKE																
482700001 A01	25	0.0	NO. OF SAMPLES (25) BELOW MIN. DET. EXCEEDS 50%									0.0				
WASHINGTON																
SEATTLE																
491840001 A01	26	0.0	NO. OF SAMPLES (26) BELOW MIN. DET. EXCEEDS 50%									0.0				
WEST VIRGINIA																
CHARLESTON																
500280001 A01	26	0.0	0.0	0.0	0.0	0.7	0.9	1.2	2.2	2.4	2.9	7.0				
WISCONSIN																
EAU CLAIRE																
510840001 A01	24	0.0	NO. OF SAMPLES (24) BELOW MIN. DET. EXCEEDS 50%									0.0				

Table 3-1 (continued). BERYLLIUM, URBAN FREQUENCY DISTRIBUTIONS, 1968

(ng/m^3)

LOCATION	NO. SAMP.	MIN.	FREQUENCY DISTRIBUTION, %									MAX.	ARITHMETIC		GEOMETRIC	
			10	20	30	40	50	60	70	80	90		MEAN	STD. DEV.	MEAN	STD. DEV.
WISCONSIN																
KENOSHA																
511540001 A01	25	0.0	NO. OF SAMPLES (			24) BELOW MIN. DET.			EXCEEDS 50%			0.4				
MADISON																
511860001 A01	25	0.0	NO. OF SAMPLES (			25, BELOW MIN. DET.			EXCEEDS 50%			0.0				
MILWAUKEE																
512200001 A01	25	0.0	NO. OF SAMPLES (			23) BELOW MIN. DET.			EXCEEDS 50%			0.4				
SUPERIOR																
513480001 A01	23	0.0	NO. OF SAMPLES (			20) BELOW MIN. DET.			EXCEEDS 50%			0.7				
WYOMING																
CASPER																
520120001 A01	26	0.0	NO. OF SAMPLES (			24) BELOW MIN. DET.			EXCEEDS 50%			0.8				
CHEYENNE																
520140001 A01	26	0.0	NO. OF SAMPLES (			25) BELOW MIN. DET.			EXCEEDS 50%			0.6				

Table 3-2. BERYLLIUM, NONURBAN FREQUENCY DISTRIBUTIONS, 1968

(ng/m^3)

LOCATION	NO. SAMP.	MIN.	FREQUENCY DISTRIBUTION, %									MAX.	ARITHMETIC		GEOMETRIC	
			10	20	30	40	50	60	70	80	90		MEAN	STD. DEV.	MEAN	STD. DEV.
ARIZONA																
GRAND CANYON NAT PI																
040070001 A03	25	0.0	NO. OF SAMPLES = 23) BELOW MIN. DET. EXCEEDS 50%									0.20				
ARKANSAS																
MONTGOMERY CO																
041760001 A03	25	0.0	NO. OF SAMPLES = 25) BELOW MIN. DET. EXCEEDS 50%									0.0				
CALIFORNIA																
HUMBOLDT CO																
053930001 A03	26	0.0	0.0	0.0	0.0	0.12	0.17	0.21	0.21	0.26	0.49	0.79				
COLORADO																
MESA VERDE NAT PARI																
061530002 A03	21	0.0	NO. OF SAMPLES = 21) BELOW MIN. DET. EXCEEDS 50%									0.0				
DELAWARE																
KENT CO																
080060001 A03	24	0.0	NO. OF SAMPLES = 23) BELOW MIN. DET. EXCEEDS 50%									0.18				
IDAHO																
BUTTE CO																
130940001 A03	24	0.0	NO. OF SAMPLES = 21) BELOW MIN. DET. EXCEEDS 50%									0.38				
INDIANA																
MONROE CO																
152800001 A03	24	0.0	NO. OF SAMPLES = 24) BELOW MIN. DET. EXCEEDS 50%									0.0				
PARKE CO																
153260001 A03	25	0.0	NO. OF SAMPLES = 24) BELOW MIN. DET. EXCEEDS 50%									0.53				
MAINE																
ACADIA NAT PARK																
200010001 A03	26	0.0	NO. OF SAMPLES = 23) BELOW MIN. DET. EXCEEDS 50%									0.40				
MARYLAND																
CALVERT CO																
210240001 A03	23	0.0	NO. OF SAMPLES = 23) BELOW MIN. DET. EXCEEDS 50%									0.0				
MISSISSIPPI																
JACKSON CO																
251280001 A03	24	0.0	NO. OF SAMPLES = 23) BELOW MIN. DET. EXCEEDS 50%									0.20				
MISSOURI																
SHANNON CO																
264480001 A03	25	0.0	NO. OF SAMPLES = 25) BELOW MIN. DET. EXCEEDS 50%									0.0				
MONTANA																
GLACIER NAT PARK																
270570001 A03	25	0.0	NO. OF SAMPLES = 22) BELOW MIN. DET. EXCEEDS 50%									0.61				
NEBRASKA																
THOMAS CO																
292480001 A03	24	0.0	NO. OF SAMPLES = 23) BELOW MIN. DET. EXCEEDS 50%									0.39				
NEVADA																
WHITE PINE CO																
290560001 A03	26	0.0	NO. OF SAMPLES = 22) BELOW MIN. DET. EXCEEDS 50%									0.15				
NEW HAMPSHIRE																
COOS CO																
300140001 A03	23	0.0	NO. OF SAMPLES = 22) BELOW MIN. DET. EXCEEDS 50%									0.18				
NEW YORK																
JEFFERSON CO																
333940001 A03	26	0.0	NO. OF SAMPLES = 26) BELOW MIN. DET. EXCEEDS 50%									0.0				
NORTH CAROLINA																
CAPE HATTERAS NAT																
340590001 A03	25	0.0	NO. OF SAMPLES = 25) BELOW MIN. DET. EXCEEDS 50%									0.0				
OKLAHOMA																
CHEROKEE CO																
370690001 A03	25	0.0	NO. OF SAMPLES = 25) BELOW MIN. DET. EXCEEDS 50%									0.0				
OREGON																
CURRY CO																
380440001 A03	26	0.0	NO. OF SAMPLES = 15) BELOW MIN. DET. EXCEEDS 50%									0.44				
PENNSYLVANIA																
CLARION CO																
391760001 A03	26	0.0	NO. OF SAMPLES = 26) BELOW MIN. DET. EXCEEDS 50%									0.0				
RHODE ISLAND																
WASHINGTON CO																
410380001 A03	26	0.0	NO. OF SAMPLES = 25) BELOW MIN. DET. EXCEEDS 50%									0.14				
SOUTH CAROLINA																
RICHLAND CO																
421900001 A03	23	0.0	NO. OF SAMPLES = 23) BELOW MIN. DET. EXCEEDS 50%									0.0				
SOUTH DAKOTA																
BLACK HILLS NAT FOI																
430110001 A03	26	0.0	NO. OF SAMPLES = 26) BELOW MIN. DET. EXCEEDS 50%									0.0				

Table 3-2 (continued). BERYLLIUM, NONURBAN FREQUENCY DISTRIBUTIONS, 1968

(ng/m^3)

LOCATION	NO. SAMP.	MIN.	FREQUENCY DISTRIBUTION, %									MAX.	ARITHMETIC		GEOMETRIC	
			10	20	30	40	50	60	70	80	90		MEAN	STD. DEV.	MEAN	STD. DEV.
TEXAS																
MATAGORDA CO																
453530001 A03	25	0.0	NO. OF SAMPLES			25% BELOW MIN. DET.			EXCEEDS 50%			0.0				
VERMONT																
ORANGE CO																
470360001 A03	26	0.0	NO. OF SAMPLES			22% BELOW MIN. DET.			EXCEEDS 50%			0.23				
VIRGINIA																
SHENANDOAH NAT PAR																
482890001 A03	26	0.0	NO. OF SAMPLES			26% BELOW MIN. DET.			EXCEEDS 50%			0.0				
WYOMING																
YELLOWSTONE NAT PA																
520860001 A03	26	0.0	NO. OF SAMPLES			19% BELOW MIN. DET.			EXCEEDS 50%			0.41				

Table 3-3. BERYLLIUM, URBAN QUARTERLY COMPOSITES AND YEARLY AVERAGES, 1969

(ng/m^3)

LOCATION	1ST QTR.	2ND QTR.	3RD QTR.	4TH QTR.	YR. AVG.
ALABAMA					
BIRMINGHAM					
010190001 A01	0.0	0.0	0.0	0.0	*****
HUNTSVILLE					
011960001 A01	0.0	0.0	0.0	0.0	*****
MOBILE					
012340001 A01	0.0	0.0	0.0	0.0	*****
MONTGOMERY					
012460001 A01	0.0	0.0	0.0	0.0	*****
ALASKA					
ANCHORAGE					
020040001 A01	0.0	0.0	0.0	0.0	*****
FAIRBANKS					
020140001 A01	0.0	0.0	0.0	0.0	*****
ARIZONA					
MESA CO					
030440001 A01	0.0	0.0	0.0	0.0	*****
PHOENIX					
030470002 A01	0.0	0.0	0.0	0.0	*****
TUCSON					
030800001 A01	0.0	0.0	0.0	0.0	*****
ARKANSAS					
LITTLE ROCK					
041440001 A01	0.0	0.0	0.0	0.0	*****
TEXARKANA					
041980001 A01	0.0	0.0	0.0	0.0	*****
WEST MEMPHIS					
042760001 A01	0.0	0.0	0.0	0.0	*****
CALIFORNIA					
ANAHEIM					
050230001 A01	0.0	0.0	0.0	0.0	*****
BURBANK					
050870001 A01	0.0	0.0	0.0	0.0	*****
FRESNO					
052400001 A01	0.0	0.0	0.0	0.0	*****
GLENDALE					
052940001 A01	0.0	0.0	0.0	0.0	*****
LONG BEACH					
054830001 A01	0.0	0.0	0.0	0.0	*****
LOS ANGELES					
054920001 A01	0.0	0.0	0.0	0.0	*****
OAKLAND					
056300001 A01	0.0	0.0	0.0	0.0	*****
OCEANSIDE					
056380001 A01	0.0	0.0	0.0	0.0	*****
RIVERSIDE					
056460001 A01	0.0	0.0	0.0	0.0	*****
SACRAMENTO					
056580001 A01	0.0	0.0	0.0	0.0	*****
SAN BERNARDINO					
056880001 A01	0.0	0.0	0.0	0.0	*****
SAN DIEGO					
056980001 A01	0.0	0.0	0.0	0.0	*****
SAN FRANCISCO					
057080001 A01	0.0	0.0	0.0	0.0	*****
SAN JOSE					
057090001 A01	0.0	0.0	0.0	0.0	*****
SANTA ANA					
057190001 A01	0.0	0.0	0.0	0.0	*****
TORRANCE					
058240001 A01	0.0	0.0	0.0	0.0	*****
COLORADO					
DENVER					
060580001 A01	0.0	0.0	0.0	0.0	*****

LOCATION	1ST QTR.	2ND QTR.	3RD QTR.	4TH QTR.	YR. AVG.
COLORADO (CONT)					
MONTEZUMA CO					
061690002 A01	0.0	0.0	0.0	0.0	*****
CONNECTICUT					
BRIDGEPORT					
070360001 A01	0.0	0.0	0.0	0.0	*****
HARTFORD					
070420001 A01	0.0	0.0	0.0	0.0	*****
NEW HAVEN					
070750001 A01	0.0	0.0	0.0	0.0	*****
WATERBURY					
071240001 A01	0.0	0.0	0.0	0.0	*****
DELAWARE					
WILMINGTON					
080260001 A01	0.0	0.0	0.0	0.0	*****
DIST COLUMBIA					
WASHINGTON					
090020001 A01	0.0	0.0	0.0	0.0	*****
FLORIDA					
JACKSONVILLE					
101940002 A01	0.0	0.0	0.0	0.0	*****
MIAMI					
102720001 A01	0.0	0.0	0.0	0.0	*****
ST PETERSBURG					
103980002 A01	0.0	0.0	0.0	0.0	*****
TAMPA					
104360002 A01	0.0	0.0	0.0	0.0	*****
GEORGIA					
ATLANTA					
110200001 A01	0.0	0.0	0.0	0.0	*****
COLUMBUS					
111240001 A01	0.0	0.0	0.0	0.0	*****
SAVANNAH					
114500001 A01	0.0	0.0	0.0	0.0	*****
HAWAII					
HONOLULU					
120120001 A01	0.0	0.0	0.0	0.0	*****
IDAHO					
BOISE CITY					
130220001 A01	0.0	0.0	0.0	0.0	*****
ILLINOIS					
CHICAGO					
141220001 A01	0.0	0.0	0.0	0.0	*****
EAST ST LOUIS					
142120001 A01	0.0	0.0	0.0	0.0	*****
JOLIET					
143760001 A01	0.0	0.0	0.0	0.0	*****
NORTH CHICAGO					
145620002 A01	0.0	0.0	0.0	0.0	*****
PEORIA					
146080001 A01	0.0	0.0	0.0	0.0	*****
ROCKFORD					
146680001 A01	0.0	0.0	0.0	0.0	*****
SPRINGFIELD					
147280001 A01	0.0	0.0	0.0	0.0	*****
INDIANA					
EAST CHICAGO					
151140001 A01	0.0	0.0	0.0	0.0	*****
EVANSVILLE					
151300001 A01	0.0	0.0	0.0	0.0	*****
FORT WAYNE					
151380001 A01	0.0	0.0	0.0	0.0	*****
GARY					
151520001 A01	0.0	0.0	0.0	0.0	*****

Table 3-3 (continued). BERYLLIUM, URBAN QUARTERLY COMPOSITES AND YEARLY AVERAGES, 1969

(ng/m^3)

LOCATION	1ST QTR.	2ND QTR.	3RD QTR.	4TH QTR.	YR. AVG.
INDIANA					
HAMMOND					
181787[illegible] A01	0.0	0.0	0.0	0.0	*****
INDIANAPOLIS					
182040001 A01	0.0	0.0	0.0	0.0	*****
NEW ALBANY					
182980001 A01	0.0	0.0	0.0	0.0	*****
SOUTH BEND					
183040001 A01	0.0	0.0	0.0	0.0	*****
TERRE HAUTE					
183040001 A01	0.0	0.0	0.0	0.0	*****
IOWA					
DAVENPORT					
193[illegible] A 1	0.0	0.0	0.0	0.0	*****
DES MOINES					
193[illegible] A01	0.0	0.0	0.0	0.0	*****
DUBUQUE					
193[illegible] A01	0.0	0.0	0.0	0.0	*****
KANSAS					
KANSAS CITY					
194[illegible] A 1	0.0	0.0	0.0	0.0	*****
TOPEKA					
194[illegible] A01	0.0	0.0	0.0	0.0	*****
WICHITA					
194[illegible] A01	0.0	0.0	0.0	0.0	*****
KENTUCKY					
COVINGTON					
1[illegible] A01	0.0	0.0	0.0	0.0	*****
LOUISVILLE					
1[illegible] A01	0.0	0.0	0.0	0.0	*****
LOUISIANA					
BATON ROUGE					
1[illegible] A01	0.0	0.0	0.0	0.0	*****
NEW ORLEANS					
1[illegible] A01	0.0	0.0	0.0	0.0	*****
SHREVEPORT					
197[illegible] A01	0.0	0.0	0.0	0.0	*****
MARYLAND					
BALTIMORE					
21[illegible] A01	0.0	0.0	0.0	0.0	*****
MASSACHUSETTS					
BOSTON					
270740001 A01	0.0	0.0	0.0	0.0	*****
FALL RIVER					
270540001 A01	0.0	0.0	0.0	0.0	*****
SPRINGFIELD					
272740001 A01	0.0	0.0	0.0	0.0	*****
WORCHESTER					
272640001 A01	0.0	0.0	0.0	0.0	*****
MICHIGAN					
DEARBORN					
2811[illegible] A01	0.0	0.0	0.0	0.0	*****
DETROIT					
281140001 A01	0.0	0.0	0.0	0.0	*****
FLINT					
281540001 A01	0.0	0.0	1.0	0.0	*****
GRAND RAPIDS					
281820001 A01	0.0	0.0	0.0	1.0	*****
LANSING					
282040001 A01	0.0	0.0	0.0	0.0	*****
SAGINAW					
284740001 A01	0.0	0.0	0.0	0.0	*****

LOCATION	1ST QTR.	2ND QTR.	3RD QTR.	4TH QTR.	YR. AVG.
MICHIGAN (CONT)					
TRAVERSE					
285120001 A01	0.0	0.0	0.0	0.0	*****
MINNESOTA					
DULUTH					
2[illegible] A01	0.0	0.0	0.0	0.0	*****
MINNEAPOLIS					
2[illegible] A01	0.0	0.0	0.0	0.0	*****
ST PAUL					
2[illegible] A01	0.0	0.0	0.0	0.0	*****
MISSOURI					
KANSAS CITY					
2[illegible] A01	0.0	0.0	0.0	0.0	*****
ST LOUIS					
2[illegible] A01	0.0	0.0	0.0	0.0	*****
MONTANA					
HELENA					
2[illegible] A01	0.0	0.0	0.0	0.0	*****
NEVADA					
RENO					
2[illegible] A01	0.0	0.0	0.0	0.0	*****
NEVADA					
LAS VEGAS					
2[illegible] A01	0.0	0.0	0.0	0.0	*****
RENO					
2[illegible] A01	0.0	0.0	0.0	0.0	*****
NEW HAMPSHIRE					
CONCORD					
300120001 A01	0.0	0.0	0.0	0.0	*****
NEW JERSEY					
HARRISON CO					
3[illegible] A01	0.0	0.0	0.0	0.0	*****
LEDARITH					
3[illegible] A01	0.0	0.0	0.0	0.0	*****
GLOUCESTER					
3[illegible] A01	0.0	0.0	0.0	0.0	*****
HAMILTON					
3[illegible] A01	0.0	0.0	0.0	0.0	*****
JERSEY CITY					
3[illegible] A01	0.0	0.0	0.0	0.0	*****
NEWARK					
3[illegible] A01	0.0	0.0	0.0	0.0	*****
PATERSON					
3[illegible] A01	0.0	0.0	0.0	0.0	*****
PERTH AMBOY					
3[illegible] A01	0.0	0.0	0.0	0.0	*****
TRENTON					
3[illegible] A01	0.0	0.0	0.0	0.0	*****
NEW MEXICO					
ALBUQUERQUE					
320340001 A01	0.0	0.0	0.0	0.0	*****
NEW YORK					
ALBANY					
330060001 A01	0.0	0.0	0.0	0.0	*****
BUFFALO					
330660001 A01	0.0	0.0	0.0	0.0	*****
NEW YORK CITY					
334680001 A01	0.0	0.0	0.0	0.0	*****
NIAGARA FALLS					
334740001 A01	0.0	0.0	0.0	0.0	*****
ROCHESTER					
335760001 A01	0.0	0.0	0.0	0.0	*****
SYRACUSE					
336420001 A01	0.0	0.0	0.0	0.0	*****

Table 3-3 (continued). BERYLLIUM, URBAN QUARTERLY COMPOSITES AND YEARLY AVERAGES, 1969

(ng/m^3)

LOCATION	1ST QTR.	2ND QTR.	3RD QTR.	4TH QTR.	YR. AVG.
NEW YORK					
UTICA					
336990301 A01	0.0	0.0	0.0	0.0	*****
NORTH CAROLINA					
CHARLOTTE					
340700001 A01	0.0	0.0	0.0	0.0	*****
DURHAM					
341160001 A01	0.0	0.0	0.0	0.0	*****
GREENSBORO					
341740001 A01	0.0	0.0	0.0	0.0	*****
WINSTON-SALEM					
344460002 A01	0.0	0.0	0.0	0.0	*****
NORTH DAKOTA					
BISMARCK					
350100001 A01	0.0	0.0	0.0	0.0	*****
OHIO					
AKRON					
360360001 A01	0.0	0.0	0.0	0.0	*****
CANTON					
361080001 A01	0.0	0.0	0.0	0.0	*****
CINCINNATI					
361220001 A01	1.4	0.0	0.0	1.4	*****
CLEVELAND					
361380001 A01	0.0	0.0	0.0	0.0	*****
COLUMBUS					
361480001 A01	0.0	0.0	0.0	0.0	*****
DAYTON					
361680001 A01	0.0	0.0	0.0	0.0	*****
TOLEDO					
366400001 A01	0.0	0.0	0.0	0.0	*****
YOUNGSTOWN					
367740001 A01	0.0	0.0	0.0	0.0	*****
OKLAHOMA					
OKLAHOMA CITY					
372200001 A01	0.0	0.0	0.0	0.0	*****
TULSA					
373000001 A01	0.0	0.0	0.0	0.0	*****
OREGON					
MEDFORD					
381160001 A01	0.0	0.0	0.0	0.0	*****
PORTLAND					
381460001 A01	0.0	0.0	0.0	0.0	*****
PENNSYLVANIA					
ALLENTOWN					
390120001 A01	0.0	0.0	0.0	0.0	*****
BETHLEHEM					
390780001 A01	0.0	0.0	0.0	0.0	*****
ERIE					
393060001 A01	0.0	0.0	0.0	0.0	*****
HARRISBURG					
393480001 A01	0.0	0.0	0.0	0.0	*****
HAZLETON					
393960001 A01	0.0	0.0	0.0	0.0	*****
JOHNSTOWN					
394460001 A01	0.0	0.0	10.0	0.0	*****
PHILADELPHIA					
397140001 A01	0.0	0.0	0.0	0.0	*****
PITTSBURGH					
397260001 A01	0.0	0.0	0.0	0.0	*****
READING					
397620001 A01	0.0	0.0	0.0	0.0	*****
SCRANTON					
398240001 A01	0.0	0.0	0.0	0.0	*****
WARMINSTER					
399180001 A01	0.0	0.0	0.0	0.0	*****
399480001 (CONT)					
WEST CHESTER					
399780001 A01	0.0	0.0	0.0	0.0	*****
WILKES-BARRE					
399420001 A01	0.0	0.0	0.0	0.0	*****
YORK					
399560001 A01	0.0	0.0	0.0	0.0	*****
PUERTO RICO					
BAYAMON					
400380001 A01	1.4	0.0	0.0	0.0	*****
CATANO					
400560002 A01	0.0	0.0	0.0	0.0	*****
GUAYANILLA					
401380001 A01	0.0	0.0	0.0	0.0	*****
PONCE					
401920001 A01	0.0	0.0	0.0	0.0	*****
SAN JUAN					
402140001 A01	0.0	0.0	0.0	0.0	*****
RHODE ISLAND					
EAST PROVIDENCE					
410120001 A01	0.0	0.0	0.0	0.0	*****
PROVIDENCE					
410300001 A01	0.0	0.0	0.0	0.0	*****
SOUTH CAROLINA					
COLUMBIA					
420760001 A01	0.0	0.0	0.0	0.0	*****
GREENVILLE					
421180001 A01	0.0	0.0	0.0	0.0	*****
TENNESSEE					
CHATTANOOGA					
440300001 A01	0.0	0.0	0.0	0.0	*****
KNOXVILLE					
441740001 A01	0.0	0.0	0.0	0.0	*****
MEMPHIS					
442360001 A01	0.0	0.0	0.0	0.0	*****
NASHVILLE					
442540001 A01	0.0	0.0	0.0	0.0	*****
TEXAS					
DALLAS					
451380002 A01	0.0	0.0	0.0	0.0	*****
EL PASO					
451700001 A01	0.0	0.0	0.0	0.0	*****
FORT WORTH					
451980001 A01	0.0	0.0	0.0	0.0	*****
HOUSTON					
452360001 A01	0.0	0.0	0.0	0.0	*****
PASADENA					
452660001 A01	0.0	0.0	0.0	0.0	*****
SAN ANTONIO					
454570001 A01	0.0	0.0	0.0	0.0	*****
UTAH					
OGDEN					
460430001 A01	0.0	0.0	0.0	0.0	*****
SALT LAKE CITY					
460920001 A01	0.0	0.0	0.0	0.0	*****
VERMONT					
BURLINGTON					
470140001 A01	0.0	0.0	0.0	0.0	*****
VIRGINIA					
DANVILLE					
480920001 A01	0.0	0.0	0.0	0.0	*****
HAMPTON					
481440001 A01	0.0	0.0	0.0	0.0	*****

Table 3-3 (continued). BERYLLIUM, URBAN QUARTERLY COMPOSITES AND YEARLY AVERAGES, 1969

(ng/m^3)

LOCATION	1ST QTR.	2ND QTR.	3RD QTR.	4TH QTR.	YR. AVG.
VIRGINIA					
LYNCHBURG					
48134 0001 A01	0.0	0.0	0.0	0.0	*****
NEWPORT NEWS					
48212 0001 A01	0.0	0.0	0.0	0.0	*****
NORFOLK					
48214 0001 A01	0.0	0.0	0.0	0.0	*****
PORTSMOUTH					
48244 0001 A01	1.4	1.1	0.0	0.0	*****
RICHMOND					
48266 0001 A01	0.0	0.0	0.0	0.0	*****
ROANOKE					
48278 0001 A01	0.0	0.0	1.8	1.4	*****
WASHINGTON					
SEATTLE					
49186 0001 A01	0.0	0.0	0.0	0.0	*****
SPOKANE					
49306 0001 A01	0.0	0.0	0.0	0.0	*****
TACOMA					
49314 0001 A01	0.0	0.0	0.0	0.0	*****
WEST VIRGINIA					
CHARLESTON					
50628 0001 A01	0.0	0.0	0.0	0.0	*****
WISCONSIN					
EAU CLAIRE					
51096 0001 A01	0.0	0.0	0.0	0.0	*****
KENOSHA					
51154 0001 A01	0.0	0.0	0.0	0.0	*****
MADISON					
51186 0001 A01	0.0	0.0	0.0	0.0	*****
MILWAUKEE					
51220 0001 A01	0.0	0.0	0.0	0.0	*****
RACINE					
51288 0001 A01	0.0	0.0	0.0	0.0	*****
SUPERIOR					
51348 0001 A01	0.0	0.0	0.0	0.0	*****
WYOMING					
CASPER					
52012 0001 A01	0.0	0.0	0.0	0.0	*****
CHEYENNE					
52014 0001 A01	0.0	0.0	0.0	0.0	*****

Table 3-4. BERYLLIUM, NONURBAN QUARTERLY COMPOSITES AND YEARLY AVERAGES, 1969

(ng/m^3)

LOCATION	1ST QTR.	2ND QTR.	3RD QTR.	4TH QTR.	YR. AVG.
ARIZONA					
GRAND CANYON NAT PK					
040370001 A03	0.0	0.0	0.0	0.0	*****
ARKANSAS					
MONTGOMERY CO					
051760001 A03	0.0	0.0	0.0	0.0	*****
CALIFORNIA					
HUMBOLDT CO					
060230001 A03	0.0	0.0	0.0	0.0	*****
FLORIDA					
MADISON CO					
120640001 A03	0.0	0.0	0.0	0.0	*****
IDAHO					
ADAMS CO					
130030001 A03	0.0	0.0	0.0	0.0	*****
INDIANA					
MONROE CO					
182810001 A03	0.0	0.0	0.0	0.0	*****
PARKE CO					
183920001 A03	0.0	0.0	0.0	0.0	*****
MAINE					
ACADIA NAT PARK					
200370001 A03	0.0	0.0	0.0	0.0	*****
MARYLAND					
CALVERT CO					
217240001 A03	0.0	0.0	0.0	0.0	*****
MISSOURI					
SHANNON CO					
294480002 A03	0.0	0.0	0.0	0.0	*****
MONTANA					
GLACIER NAT PARK					
270570001 A03	0.0	0.0	0.0	0.0	*****
NEBRASKA					
THOMAS CO					
282440001 A03	0.0	0.0	0.0	0.0	*****
NEVADA					
WHITE PINE CO					
320560001 A03	0.0	0.0	0.0	0.0	*****
NEW HAMPSHIRE					
COOS CO					
330140001 A03	0.0	0.0	0.0	0.0	*****
NEW YORK					
JEFFERSON CO					
473340001 A03	0.0	0.0	0.0	0.0	*****

LOCATION	1ST QTR.	2ND QTR.	3RD QTR.	4TH QTR.	YR. AVG.
NORTH CAROLINA					
CAPE HATTERAS					
349590001 A	0.0	0.0	0.0	0.0	*****
OKLAHOMA					
CHEROKEE CO					
370440001 A03	0.0	0.0	0.0	0.0	*****
OREGON					
CURRY CO					
380440001 A03	0.0	0.0	0.0	0.0	*****
PENNSYLVANIA					
CLARION CO					
391760001 A03	0.0	0.0	0.0	0.0	*****
RHODE ISLAND					
WASHINGTON CO					
410380002 A03	0.0	0.0	0.0	1.00	*****
SOUTH CAROLINA					
RICHLAND CO					
421920001 A03	0.0	0.0	0.0	0.0	*****
SOUTH DAKOTA					
BLACK HILLS NAT FO					
430110001 A03	0.0	0.0	0.0	0.0	*****
TENNESSEE					
CUMBERLAND CO					
440680001 A03	0.0	0.0	0.0	0.0	*****
TEXAS					
MATAGORDA CO					
483530001 A03	0.0	0.0	0.0	1.10	*****
VERMONT					
ORANGE CO					
470360001 A03	0.0	0.0	0.0	0.0	*****
VIRGINIA					
SHENANDOAH NAT PAR					
487830001 A03	0.0	0.0	0.0	0.0	*****
WYTHE CO					
489640001 A03	0.0	0.0	0.0	0.0	*****
WISCONSIN					
DOOR CO					
510780001 A03	0.0	0.0	0.0	0.0	*****
WYOMING					
YELLOWSTONE NAT PA					
520840001 A03	0.0	0.0	0.0	0.0	*****

SECTION 4. URBAN AND NONURBAN METALS IN SUSPENDED PARTICULATES: CADMIUM

Table 4-1. CADMIUM, URBAN FREQUENCY DISTRIBUTIONS, 1968

($\mu g/m^3$)

LOCATION	NO. SAMP.	MIN.	FREQUENCY DISTRIBUTION, %									MAX.	ARITHMETIC		GEOMETRIC	
			10	20	30	40	50	60	70	80	90		MEAN	STD. DEV.	MEAN	STD. DEV.
ALABAMA																
GADSDEN																
011480001 A01	25	0.0	NO. OF SAMPLES (21) BELOW MIN. DET. EXCEEDS 50%									0.009				
HUNTSVILLE																
011860001 A01	26	0.0	NO. OF SAMPLES (26) BELOW MIN. DET. EXCEEDS 50%									0.002				
MOBILE																
012380001 A01	25	0.0	0.0	0.0	0.0	0.0	0.002	0.002	0.003	0.004	0.004	0.008				
MONTGOMERY																
012460001 A01	26	0.0	NO. OF SAMPLES (22) BELOW MIN. DET. EXCEEDS 50%									0.003				
ALASKA																
ANCHORAGE																
020040003 A01	26	0.0	NO. OF SAMPLES (26) BELOW MIN. DET. EXCEEDS 50%									0.002				
FAIRBANKS																
020160001 A01	23	0.0	NO. OF SAMPLES (23) BELOW MIN. DET. EXCEEDS 50%									0.0				
ARIZONA																
MARICOPA CO																
030440001 A01	25	0.0	NO. OF SAMPLES (24) BELOW MIN. DET. EXCEEDS 50%									0.007				
PHOENIX																
030600002 A01	26	0.0	NO. OF SAMPLES (16) BELOW MIN. DET. EXCEEDS 50%									0.015				
TUCSON																
030860001 A01	26	0.0	NO. OF SAMPLES (23) BELOW MIN. DET. EXCEEDS 50%									0.003				
ARKANSAS																
LITTLE ROCK																
041440001 A01	25	0.0	NO. OF SAMPLES (22) BELOW MIN. DET. EXCEEDS 50%									0.004				
TEXARKANA																
042560001 A01	25	0.0	NO. OF SAMPLES (24) BELOW MIN. DET. EXCEEDS 50%									0.002				
WEST MEMPHIS																
042740001 A01	26	0.0	NO. OF SAMPLES (20) BELOW MIN. DET. EXCEEDS 50%									0.008				
CALIFORNIA																
BURBANK																
050900001 A01	26	0.0	NO. OF SAMPLES (18) BELOW MIN. DET. EXCEEDS 50%									0.006				
GLENDALE																
052940001 A01	25	0.0	NO. OF SAMPLES (21) BELOW MIN. DET. EXCEEDS 50%									0.004				
LONG BEACH																
054100001 A01	26	0.0	NO. OF SAMPLES (14) BELOW MIN. DET. EXCEEDS 50%									0.044				
LOS ANGELES																
054180001 A01	26	0.0	0.0	0.0	0.0	0.0	0.0	0.003	0.003	0.004	0.005	0.008				
OAKLAND																
055300001 A01	25	0.0	NO. OF SAMPLES (13) BELOW MIN. DET. EXCEEDS 50%									0.017				
ONTARIO																
055380001 A01	24	0.0	0.0	0.0	0.0	0.002	0.003	0.003	0.004	0.004	0.005	0.008				
PASADENA																
055760001 A01	25	0.0	NO. OF SAMPLES (13) BELOW MIN. DET. EXCEEDS 50%									0.023				
RIVERSIDE																
056400001 A01	26	0.0	NO. OF SAMPLES (19) BELOW MIN. DET. EXCEEDS 50%									0.006				
SACRAMENTO																
056580001 A01	26	0.0	NO. OF SAMPLES (22) BELOW MIN. DET. EXCEEDS 50%									0.005				
SAN BERNARDINO																
056680001 A01	26	0.0	NO. OF SAMPLES (19) BELOW MIN. DET. EXCEEDS 50%									0.005				
SAN DIEGO																
056800001 A01	26	0.0	NO. OF SAMPLES (22) BELOW MIN. DET. EXCEEDS 50%									0.030				
SAN FRANCISCO																
056860001 A01	26	0.0	NO. OF SAMPLES (23) BELOW MIN. DET. EXCEEDS 50%									0.005				
COLORADO																
DENVER																
060580001 A01	24	0.0	0.0	0.0	0.0	0.0	0.002	0.003	0.003	0.005	0.006	0.013				
CONNECTICUT																
HARTFORD																
070420001 A01	26	0.0	NO. OF SAMPLES (17) BELOW MIN. DET. EXCEEDS 50%									0.011				
NEW HAVEN																
070700001 A01	26	0.0	NO. OF SAMPLES (15) BELOW MIN. DET. EXCEEDS 50%									0.012				
DELAWARE																
NEWARK																
080140001 A01	24	0.0	NO. OF SAMPLES (13) BELOW MIN. DET. EXCEEDS 50%									0.006				
WILMINGTON																
080260001 A01	23	0.0	0.0	0.0	0.0	0.002	0.002	0.003	0.003	0.005	0.005	0.033				

Table 4-1 (continued). CADMIUM, URBAN FREQUENCY DISTRIBUTIONS, 1968

($\mu g/m^3$)

LOCATION	NO. SAMP.	MIN.	FREQUENCY DISTRIBUTION, %									MAX.	ARITHMETIC		GEOMETRIC	
			10	20	30	40	50	60	70	80	90		MEAN	STD. DEV.	MEAN	STD. DEV.
DIST COLUMBIA																
WASHINGTON																
090020001 A01	26	0.0	NO. OF SAMPLES (16) BELOW MIN. DET. EXCEEDS 50%									0.008				
FLORIDA																
JACKSONVILLE																
101960002 A01	25	0.0	NO. OF SAMPLES (21) BELOW MIN. DET. EXCEEDS 50%									0.004				
FLORIDA																
TAMPA																
104360002 A01	23	0.0	0.0	0.0	0.0	0.002	0.002	0.004	0.005	0.008	0.013	0.033				
GEORGIA																
ATLANTA																
110200001 A01	26	0.0	NO. OF SAMPLES (15) BELOW MIN. DET. EXCEEDS 50%									0.018				
HAWAII																
HONOLULU																
120170001 A01	26	0.0	NO. OF SAMPLES (24) BELOW MIN. DET. EXCEEDS 50%									0.005				
IDAHO																
BOISE CITY																
130220001 A01	26	0.0	NO. OF SAMPLES (25) BELOW MIN. DET. EXCEEDS 50%									0.003				
ILLINOIS																
CHICAGO																
141220001 A01	25	0.0	0.0	0.003	0.004	0.005	0.006	0.007	0.010	0.013	0.017	0.018	0.008	0.01	0.006	2.52
EAST ST LOUIS																
142120001 A01	25	0.0	0.0	0.0	0.002	0.003	0.005	0.005	0.020	0.024	0.074	0.110	0.014	0.03	0.006	4.46
JOLIET																
143760001 A01	21	0.0	NO. OF SAMPLES (12) BELOW MIN. DET. EXCEEDS 50%									0.011				
ROCKFORD																
146680001 A01	25	0.0	0.0	0.0	0.0	0.0	0.003	0.003	0.006	0.010	0.022	0.043				
SPRINGFIELD																
147240001 A01	23	0.0	NO. OF SAMPLES (18) BELOW MIN. DET. EXCEEDS 50%									0.038				
INDIANA																
EAST CHICAGO																
151140001 A01	26	0.0	0.002	0.003	0.004	0.004	0.006	0.006	0.008	0.009	0.015	0.018	0.007	0.00	0.005	2.04
HAMMOND																
151740001 A01	26	0.0	0.0	0.0	0.0	0.002	0.003	0.004	0.005	0.006	0.008	0.014				
INDIANAPOLIS																
152340001 A01	25	0.0	0.0	0.002	0.003	0.003	0.004	0.005	0.007	0.008	0.013	0.014	0.005	0.00	0.004	2.29
SOUTH BEND																
153880001 A01	24	0.0	0.0	0.0	0.0	0.003	0.003	0.004	0.004	0.006	0.007	0.014				
IOWA																
CEDAR RAPIDS																
160640001 A01	26	0.0	NO. OF SAMPLES (23) BELOW MIN. DET. EXCEEDS 50%									0.004				
DES MOINES																
161180001 A01	26	0.0	NO. OF SAMPLES (22) BELOW MIN. DET. EXCEEDS 50%									0.008				
DUBUQUE																
161260001 A01	23	0.0	NO. OF SAMPLES (19) BELOW MIN. DET. EXCEEDS 50%									0.006				
KANSAS																
KANSAS CITY																
171800001 A01	25	0.0	NO. OF SAMPLES (15) BELOW MIN. DET. EXCEEDS 50%									0.007				
TOPEKA																
173560001 A01	26	0.0	NO. OF SAMPLES (23) BELOW MIN. DET. EXCEEDS 50%									0.010				
WICHITA																
173740001 A01	25	0.0	NO. OF SAMPLES (22) BELOW MIN. DET. EXCEEDS 50%									0.002				
KENTUCKY																
ASHLAND																
180080002 A01	23	0.0	0.0	0.0	0.002	0.003	0.005	0.006	0.012	0.019	0.021	0.055				
COVINGTON																
180800001 A01	25	0.0	0.0	0.0	0.0	0.0	0.002	0.003	0.003	0.005	0.011	0.016				
LEXINGTON																
182300001 A01	24	0.0	NO. OF SAMPLES (24) BELOW MIN. DET. EXCEEDS 50%									0.0				
LOUISVILLE																
182380001 A01	25	0.0	NO. OF SAMPLES (16) BELOW MIN. DET. EXCEEDS 50%									0.012				
LOUISIANA																
NEW ORLEANS																
192020002 A01	25	0.0	NO. OF SAMPLES (22) BELOW MIN. DET. EXCEEDS 50%									0.012				
MAINE																
PORTLAND																
200960002 A01	21	0.0	NO. OF SAMPLES (11) BELOW MIN. DET. EXCEEDS 50%									0.017				
MARYLAND																
BALTIMORE																
210120001 A01	26	0.0	0.0	0.0	0.0	0.0	0.0	0.003	0.004	0.006	0.011	0.013				

Table 4-1 (continued). CADMIUM, URBAN FREQUENCY DISTRIBUTIONS, 1968

($\mu g/m^3$)

LOCATION	NO. SAMP.	MIN.	FREQUENCY DISTRIBUTION, %									MAX.	ARITHMETIC		GEOMETRIC	
			10	20	30	40	50	60	70	80	90		MEAN	STD. DEV.	MEAN	STD. DEV.
MASSACHUSETTS																
BOSTON																
220240001 A01	25	0.0	NO. OF SAMPLES (16) BELOW MIN. DET. EXCEEDS 50%									0.007				
WORCHESTER																
222660001 A01	24	0.0	NO. OF SAMPLES (19) BELOW MIN. DET. EXCEEDS 50%									0.006				
MICHIGAN																
DETROIT																
231180001 A01	26	0.0	0.0	0.0	0.003	0.005	0.006	0.007	0.008	0.011	0.015	0.031				
FLINT																
231540001 A01	26	0.0	NO. OF SAMPLES (22) BELOW MIN. DET. EXCEEDS 50%									0.004				
GRAND RAPIDS																
231920001 A01	26	0.0	0.0	0.0	0.0	0.0	0.0	0.002	0.005	0.007	0.014	0.042				
TRENTON																
235120001 A01	25	0.0	NO. OF SAMPLES (17) BELOW MIN. DET. EXCEEDS 50%									0.006				
MINNESOTA																
DULUTH																
241040001 A01	23	0.0	NO. OF SAMPLES (22) BELOW MIN. DET. EXCEEDS 50%									0.004				
MINNEAPOLIS																
242260001 A01	26	0.0	NO. OF SAMPLES (19) BELOW MIN. DET. EXCEEDS 50%									0.006				
MOORHEAD																
242320001 A01	26	0.0	NO. OF SAMPLES (26) BELOW MIN. DET. EXCEEDS 50%									0.002				
ST PAUL																
243300001 A01	26	0.0	0.0	0.0	0.0	0.002	0.003	0.004	0.006	0.006	0.015	0.059				
MISSISSIPPI																
JACKSON																
251260002 A01	26	0.0	NO. OF SAMPLES (18) BELOW MIN. DET. EXCEEDS 50%									0.015				
MISSOURI																
KANSAS CITY																
267340001 A01	24	0.0	NO. OF SAMPLES (17) BELOW MIN. DET. EXCEEDS 50%									0.006				
MONTANA																
HELENA																
273720001 A01	24	0.0	NO. OF SAMPLES (15) BELOW MIN. DET. EXCEEDS 50%									0.100				
NEBRASKA																
OMAHA																
281880001 A01	25	0.0	NO. OF SAMPLES (20) BELOW MIN. DET. EXCEEDS 50%									0.024				
NEVADA																
LAS VEGAS																
290720001 A01	24	0.0	NO. OF SAMPLES (24) BELOW MIN. DET. EXCEEDS 50%									0.0				
RENO																
290440001 A01	25	0.0	NO. OF SAMPLES (22) BELOW MIN. DET. EXCEEDS 50%									0.004				
NEW HAMPSHIRE																
CONCORD																
300120001 A01	25	0.0	NO. OF SAMPLES (23) BELOW MIN. DET. EXCEEDS 50%									0.004				
NEW JERSEY																
BAYONNE																
31 180001 A01	21	0.0	0.0	0.003	0.004	0.005	0.007	0.008	0.009	0.010	0.012	0.014	0.007	0.00	0.005	2.30
BURLINGTON CO																
310660002 A01	25	0.0	0.0	0.0	0.002	0.002	0.002	0.003	0.004	0.005	0.006	0.008				
CAMDEN																
310720001 A01	26	0.0	0.002	0.003	0.003	0.004	0.005	0.007	0.008	0.010	0.016	0.021	0.007	0.01	0.005	2.25
GLASSBORO																
311700001 A01	25	0.0	0.0	0.002	0.003	0.003	0.004	0.004	0.005	0.006	0.008	0.014	0.005	0.00	0.004	1.99
HAMILTON																
311940001 A01	21	0.0	0.0	0.002	0.003	0.004	0.004	0.005	0.005	0.006	0.007	0.051	0.006	0.01	0.004	2.17
JERSEY CITY																
312320001 A01	25	0.0	0.0	0.003	0.004	0.005	0.006	0.006	0.007	0.009	0.015	0.025	0.008	0.01	0.006	2.19
NEWARK																
313480001 A01	24	0.0	0.0	0.002	0.004	0.004	0.005	0.008	0.014	0.030	0.060	0.150	0.021	0.04	0.008	4.04
PATERSON																
314140001 A01	25	0.0	0.0	0.0	0.0	0.0	0.002	0.004	0.005	0.006	0.011	0.015				
PERTH AMBOY																
314220001 A01	26	0.0	0.0	0.0	0.003	0.004	0.004	0.006	0.007	0.009	0.011	0.015	0.005	0.00	0.004	2.44
TRENTON																
315400001 A01	24	0.0	NO. OF SAMPLES (16) BELOW MIN. DET. EXCEEDS 50%									0.010				
NEW MEXICO																
ALBUQUERQUE																
320040001 A01	24	0.0	NO. OF SAMPLES (24) BELOW MIN. DET. EXCEEDS 50%									0.0				

Table 4-1 (continued). CADMIUM, URBAN FREQUENCY DISTRIBUTIONS, 1968

($\mu g/m^3$)

LOCATION	NO. SAMP.	MIN.	FREQUENCY DISTRIBUTION, %									MAX.	ARITHMETIC MEAN	ARITHMETIC STD. DEV.	GEOMETRIC MEAN	GEOMETRIC STD. DEV.
			10	20	30	40	50	60	70	80	90					
NORTH CAROLINA																
CHARLOTTE																
340700001 A01	25	0.0	NO. OF SAMPLES (21) BELOW MIN. DET. EXCEEDS 50%									0.006				
DURHAM																
341160001 A01	23	0.0	NO. OF SAMPLES (20) BELOW MIN. DET. EXCEEDS 50%									0.006				
NORTH DAKOTA																
BISMARCK																
350100001 A01	25	0.0	NO. OF SAMPLES (25) BELOW MIN. DET. EXCEEDS 50%									0.0				
OHIO																
AKRON																
360040001 A01	25	0.0	0.0	0.0	0.0	0.002	0.002	0.003	0.003	0.004	0.005	0.013				
CINCINNATI																
361220001 A01	26	0.0	0.0	0.0	0.0	0.0	0.002	0.003	0.007	0.011	0.020	0.061				
CLEVELAND																
361300001 A01	26	0.0	0.0	0.002	0.003	0.004	0.005	0.009	0.011	0.014	0.018	0.032	0.009	0.01	0.005	2.94
COLUMBUS																
361460001 A01	24	0.0	0.0	0.0	0.0	0.0	0.0	0.002	0.003	0.004	0.006	0.012				
DAYTON																
361660001 A01	26	0.0	0.0	0.0	0.0	0.0	0.0	0.004	0.004	0.005	0.006	0.010				
TOLEDO																
361860001 A01	24	0.0	NO. OF SAMPLES (16) BELOW MIN. DET. EXCEEDS 50%									0.006				
YOUNGSTOWN																
367760001 A01	25	0.0	0.0	0.0	0.003	0.004	0.005	0.006	0.007	0.009	0.013	0.022	0.006	0.01	0.004	2.54
OKLAHOMA																
OKLAHOMA CITY																
372200001 A01	22	0.0	NO. OF SAMPLES (19) BELOW MIN. DET. EXCEEDS 50%									0.012				
TULSA																
373000001 A01	24	0.0	NO. OF SAMPLES (19) BELOW MIN. DET. EXCEEDS 50%									0.007				
OREGON																
MEDFORD																
381140001 A01	25	0.0	NO. OF SAMPLES (21) BELOW MIN. DET. EXCEEDS 50%									0.003				
PORTLAND																
381460001 A01	26	0.0	NO. OF SAMPLES (20) BELOW MIN. DET. EXCEEDS 50%									0.015				
PENNSYLVANIA																
ALLENTOWN																
390120001 A01	26	0.0	0.0	0.002	0.003	0.004	0.005	0.006	0.011	0.014	0.023	0.029	0.009	0.01	0.005	3.01
ALTOONA																
390140001 A01	23	0.0	NO. OF SAMPLES (15) BELOW MIN. DET. EXCEEDS 50%									0.009				
BETHLEHEM																
390780002 A01	24	0.0	0.0	0.0	0.003	0.004	0.005	0.006	0.009	0.017	0.021	0.050	0.009	0.01	0.005	3.24
HARRISBURG																
390840001 A01	26	0.0	NO. OF SAMPLES (18) BELOW MIN. DET. EXCEEDS 50%									0.037				
HAZLETON																
390960001 A01	24	0.0	0.0	0.0	0.0	0.0	0.002	0.004	0.007	0.027	0.028	0.062				
JOHNSTOWN																
394460001 A01	23	0.0	0.0	0.002	0.002	0.003	0.004	0.005	0.005	0.007	0.012	0.025	0.005	0.01	0.004	2.39
PHILADELPHIA																
397140001 A01	26	0.0	0.0	0.0	0.002	0.003	0.004	0.005	0.006	0.010	0.048	0.093	0.012	0.02	0.004	3.66
PITTSBURGH																
397260001 A01	26	0.0	0.0	0.0	0.003	0.003	0.005	0.006	0.008	0.011	0.023	0.036				
READING																
397620001 A01	25	0.0	0.0	0.0	0.003	0.003	0.004	0.005	0.007	0.007	0.016	0.024	0.006	0.01	0.004	2.59
SCRANTON																
398040001 A01	25	0.0	0.0	0.0	0.0	0.003	0.004	0.004	0.006	0.007	0.014	0.025				
WARMINSTER																
399160001 A01	25	0.0	0.0	0.0	0.002	0.002	0.003	0.004	0.006	0.007	0.011	0.020				
WEST CHESTER																
399280001 A01	24	0.0	0.0	0.0	0.0	0.0	0.0	0.002	0.002	0.002	0.006	0.019				
WILKES-BARRE																
399430001 A01	24	0.0	NO. OF SAMPLES (18) BELOW MIN. DET. EXCEEDS 50%									0.037				
YORK																
399560001 A01	25	0.0	NO. OF SAMPLES (17) BELOW MIN. DET. EXCEEDS 50%									0.009				
PUERTO RICO																
BAYAMON																
400340001 A01	25	0.0	NO. OF SAMPLES (21) BELOW MIN. DET. EXCEEDS 50%									0.007				
CAYAO																
400560001 A01	25	0.0	NO. OF SAMPLES (25) BELOW MIN. DET. EXCEEDS 50%									0.0				

Table 4-1 (continued). CADMIUM, URBAN FREQUENCY DISTRIBUTIONS, 1968

($\mu g/m^3$)

LOCATION	NO. SAMP.	MIN.	FREQUENCY DISTRIBUTION, %									MAX.	ARITHMETIC		GEOMETRIC	
			10	20	30	40	50	60	70	80	90		MEAN	STD. DEV.	MEAN	STD. DEV.
PUERTO RICO																
GUAYANILLA																
401040001 A01	25	0.0	NO. OF SAMPLES			25) BELOW MIN. DET. EXCEEDS 50%						0.002				
PONCE																
401920001 A01	25	0.0	NO. OF SAMPLES			25) BELOW MIN. DET. EXCEEDS 50%						0.0				
RHODE ISLAND																
EAST PROVIDENCE																
410120001 A01	26	0.0	NO. OF SAMPLES			19) BELOW MIN. DET. EXCEEDS 50%						0.005				
PROVIDENCE																
410300001 A01	25	0.0	NO. OF SAMPLES			13) BELOW MIN. DET. EXCEEDS 50%						0.009				
SOUTH CAROLINA																
COLUMBIA																
420760001 A01	24	0.0	NO. OF SAMPLES			15) BELOW MIN. DET. EXCEEDS 50%						0.019				
GREENVILLE																
421140001 A01	25	0.0	NO. OF SAMPLES			22) BELOW MIN. DET. EXCEEDS 50%						0.004				
SOUTH DAKOTA																
SIOUX FALLS																
431440001 A01	22	0.0	NO. OF SAMPLES			21) BELOW MIN. DET. EXCEEDS 50%						0.005				
TENNESSEE																
CHATTANOOGA																
440380001 A01	25	0.0	0.0	0.0	0.0	0.0	0.003	0.004	0.006	0.009	0.010	0.012				
KNOXVILLE																
441740001 A01	26	0.0	NO. OF SAMPLES			24) BELOW MIN. DET. EXCEEDS 50%						0.012				
MEMPHIS																
442340001 A01	25	0.0	NO. OF SAMPLES			22) BELOW MIN. DET. EXCEEDS 50%						0.004				
NASHVILLE																
442540001 A01	25	0.0	NO. OF SAMPLES			20) BELOW MIN. DET. EXCEEDS 50%						0.007				
TEXAS																
DALLAS																
451310002 A01	26	0.0	NO. OF SAMPLES			17) BELOW MIN. DET. EXCEEDS 50%						0.014				
HOUSTON																
452560001 A01	26	0.0	NO. OF SAMPLES			25) BELOW MIN. DET. EXCEEDS 50%						0.007				
PASADENA																
454060001 A01	26	0.0	NO. OF SAMPLES			21) BELOW MIN. DET. EXCEEDS 50%						0.005				
SAN ANTONIO																
454570001 A01	25	0.0	NO. OF SAMPLES			20) BELOW MIN. DET. EXCEEDS 50%						0.004				
UTAH																
OGDEN																
460640001 A01	25	0.0	NO. OF SAMPLES			23) BELOW MIN. DET. EXCEEDS 50%						0.005				
SALT LAKE CITY																
460920001 A01	26	0.0	NO. OF SAMPLES			19) BELOW MIN. DET. EXCEEDS 50%						0.015				
VERMONT																
BURLINGTON																
470140001 A01	24	0.0	NO. OF SAMPLES			23) BELOW MIN. DET. EXCEEDS 50%						0.002				
VIRGINIA																
DANVILLE																
480920001 A01	25	0.0	NO. OF SAMPLES			23) BELOW MIN. DET. EXCEEDS 50%						0.005				
HAMPTON																
481440001 A01	25	0.0	NO. OF SAMPLES			20) BELOW MIN. DET. EXCEEDS 50%						0.004				
LYNCHBURG																
481840001 A01	26	0.0	0.0	0.0	0.0	0.0	0.0	0.003	0.004	0.012	0.016	0.024				
NORFOLK																
482140001 A01	26	0.0	NO. OF SAMPLES			19) BELOW MIN. DET. EXCEEDS 50%						0.011				
PORTSMOUTH																
482440001 A01	25	0.0	NO. OF SAMPLES			17) BELOW MIN. DET. EXCEEDS 50%						0.011				
RICHMOND																
482660001 A01	26	0.0	NO. OF SAMPLES			21) BELOW MIN. DET. EXCEEDS 50%						0.008				
ROANOKE																
482700001 A01	25	0.0	NO. OF SAMPLES			16) BELOW MIN. DET. EXCEEDS 50%						0.009				
WASHINGTON																
SEATTLE																
491840001 A01	26	0.0	NO. OF SAMPLES			19) BELOW MIN. DET. EXCEEDS 50%						0.004				
WEST VIRGINIA																
CHARLESTON																
500280001 A01	26	0.0	NO. OF SAMPLES			23) BELOW MIN. DET. EXCEEDS 50%						0.005				
WISCONSIN																
EAU CLAIRE																
510940001 A01	24	0.0	NO. OF SAMPLES			23) BELOW MIN. DET. EXCEEDS 50%						0.002				

Table 4-1 (continued). CADMIUM, URBAN FREQUENCY DISTRIBUTIONS, 1968

($\mu g/m^3$)

LOCATION	NO. SAMP.	MIN.	FREQUENCY DISTRIBUTION, %									MAX.	ARITHMETIC		GEOMETRIC	
			10	20	30	40	50	60	70	80	90		MEAN	STD. DEV.	MEAN	STD. DEV.
WISCONSIN																
KENOSHA																
511540001 A01	25	0.0	NO. OF SAMPLES (19) BELOW MIN. DET. EXCEEDS 50%									0.006				
MADISON																
511460001 A01	25	0.0	NO. OF SAMPLES (25) BELOW MIN. DET. EXCEEDS 50%									0.001				
MILWAUKEE																
512200001 A01	25	0.0	0.0	0.0	0.0	0.0	0.002	0.002	0.004	0.005	0.007	0.010				
SUPERIOR																
513480001 A01	23	0.0	NO. OF SAMPLES (22) BELOW MIN. DET. EXCEEDS 50%									0.004				
WYOMING																
CASPER																
520120001 A01	26	0.0	NO. OF SAMPLES (26) BELOW MIN. DET. EXCEEDS 50%									0.0				
CHEYENNE																
520140001 A01	26	0.0	NO. OF SAMPLES (25) BELOW MIN. DET. EXCEEDS 50%									0.003				

Table 4-2. CADMIUM, NONURBAN FREQUENCY DISTRIBUTIONS, 1968

($\mu g/m^3$)

LOCATION	NO. SAMP.	MIN.	FREQUENCY DISTRIBUTION, % 10	20	30	40	50	60	70	80	90	MAX.	ARITHMETIC MEAN	ARITHMETIC STD. DEV.	GEOMETRIC MEAN	GEOMETRIC STD. DEV.
ARIZONA																
GRAND CANYON NAT PI																
030370001 A03	25	1.0	NO. OF SAMPLES <			24) BELOW MIN. DET. EXCEEDS 50%						.0012				
ARKANSAS																
MONTGOMERY CO																
041760001 A03	25	1.0	NO. OF SAMPLES <			23) BELOW MIN. DET. EXCEEDS 50%						.0013				
CALIFORNIA																
HUMBOLDT CO																
053330001 A03	26	1.0	NO. OF SAMPLES <			24) BELOW MIN. DET. EXCEEDS 50%						.0008				
COLORADO																
MESA VERDE NAT PARK																
061530002 A03	21	1.0	NO. OF SAMPLES <			19) BELOW MIN. DET. EXCEEDS 50%						.0007				
DELAWARE																
KENT CO																
080360001 A03	24	1.0	1.0	1.0	1.0006	1.0008	1.0008	1.0010	1.0013	1.0017	1.0020	.0024				
IDAHO																
BUTTE CO																
130340001 A03	24	1.0	NO. OF SAMPLES <			22) BELOW MIN. DET. EXCEEDS 50%						.0044				
INDIANA																
MONROE CO																
152800001 A03	24	1.0	NO. OF SAMPLES <			14) BELOW MIN. DET. EXCEEDS 50%						.0028				
PARKE CO																
153260001 A03	25	1.0	1.0	1.0	1.0	1.0	1.0006	1.0006	1.0007	1.0009	1.0012	.0029				
MAINE																
ACADIA NAT PARK																
200010001 A03	26	1.0	NO. OF SAMPLES <			20) BELOW MIN. DET. EXCEEDS 50%						.0011				
MARYLAND																
CALVERT CO																
210240001 A03	23	1.0	1.0009	1.0013	1.0013	1.0015	1.0016	1.0018	1.0019	1.0027	1.0029	.0046	.0018	0.001	.0016	1.76
MISSISSIPPI																
JACKSON CO																
251240001 A03	24	1.0	NO. OF SAMPLES <			22) BELOW MIN. DET. EXCEEDS 50%						.0008				
MISSOURI																
SHANNON CO																
264490001 A03	25	1.0	NO. OF SAMPLES <			21) BELOW MIN. DET. EXCEEDS 50%						.0017				
MONTANA																
GLACIER NAT PARK																
270570001 A03	25	1.0	NO. OF SAMPLES <			24) BELOW MIN. DET. EXCEEDS 50%						.0015				
NEBRASKA																
THOMAS CO																
282490001 A03	24	1.0	NO. OF SAMPLES <			24) BELOW MIN. DET. EXCEEDS 50%						.0				
NEVADA																
WHITE PINE CO																
290540001 A03	26	1.0	NO. OF SAMPLES <			26) BELOW MIN. DET. EXCEEDS 50%						.0				
NEW HAMPSHIRE																
COOS CO																
300140001 A03	23	1.0	NO. OF SAMPLES <			19) BELOW MIN. DET. EXCEEDS 50%						.0029				
NEW YORK																
JEFFERSON CO																
333340001 A03	26	1.0	NO. OF SAMPLES <			16) BELOW MIN. DET. EXCEEDS 50%						.0022				
NORTH CAROLINA																
CAPE HATTERAS NAT																
340590001 A03	25	1.0	NO. OF SAMPLES <			19) BELOW MIN. DET. EXCEEDS 50%						.0024				
OKLAHOMA																
CHEROKEE CO																
370490001 A03	25	1.0	NO. OF SAMPLES <			21) BELOW MIN. DET. EXCEEDS 50%						.0026				
OREGON																
CURRY CO																
380440001 A03	26	1.0	NO. OF SAMPLES <			25) BELOW MIN. DET. EXCEEDS 50%						.0012				
PENNSYLVANIA																
CLARION CO																
391760001 A03	26	1.0	1.0	1.0	1.0	1.0007	1.0010	1.0011	1.0016	1.0022	1.0048	1.0074				
RHODE ISLAND																
WASHINGTON CO																
410380001 A03	25	1.0	1.0	1.0	1.0	1.0	1.0	1.0008	1.0009	1.0010	1.0019	1.0048				
SOUTH CAROLINA																
RICHLAND CO																
421900001 A03	23	1.0	NO. OF SAMPLES <			17) BELOW MIN. DET. EXCEEDS 50%						.0048				
SOUTH DAKOTA																
BLACK HILLS NAT FO																
430110001 A03	26	1.0	NO. OF SAMPLES <			25) BELOW MIN. DET. EXCEEDS 50%						.0007				

Table 4-2 (continued). CADMIUM, NONURBAN FREQUENCY DISTRIBUTIONS, 1968

($\mu g/m^3$)

LOCATION	NO. SAMP.	MIN.	FREQUENCY DISTRIBUTION, %									MAX.	ARITHMETIC		GEOMETRIC	
			10	20	30	40	50	60	70	80	90		MEAN	STD. DEV.	MEAN	STD. DEV.
TEXAS																
MATAGORDA CO																
453530001 A03	25	.0	NO. OF SAMPLES			22% BELOW MIN. DET.			EXCEEDS 50%			.0032				
VERMONT																
ORANGE CO																
470360001 A03	26	.0	NO. OF SAMPLES			23% BELOW MIN. DET.			EXCEEDS 50%			.0032				
VIRGINIA																
SHENANDOAH NAT PAR																
482490001 A03	26	.0	NO. OF SAMPLES			23% BELOW MIN. DET.			EXCEEDS 50%			.0015				
WYOMING																
YELLOWSTONE NAT PA																
520860001 A03	26	.0	NO. OF SAMPLES			25% BELOW MIN. DET.			EXCEEDS 50%			.0004				

Table 4-3. CADMIUM, URBAN QUARTERLY COMPOSITES AND YEARLY AVERAGES, 1969

($\mu g/m^3$)

LOCATION	1ST QTR.	2ND QTR.	3RD QTR.	4TH QTR.	YR. AVG.
ALABAMA					
GADSDEN					
011480001 A01	0.0	0.0	0.0	0.003	*****
HUNTSVILLE					
011840001 A01	0.003	0.003	0.0	0.003	0.003
MOBILE					
012380001 A01	0.010	0.008	0.004	0.005	0.007
MONTGOMERY					
012460001 A01	0.005	0.005	0.0	0.005	0.004
ALASKA					
ANCHORAGE					
020040003 A01	0.0	0.004	0.003	0.003	0.003
FAIRBANKS					
020150001 A01	0.003	0.003	0.004	0.004	0.004
ARIZONA					
MARICOPA CO					
030440001 A01	0.004	0.004	0.003	0.0	0.003
PHOENIX					
030290002 A01	0.005	0.005	0.005	0.009	0.006
TUCSON					
030860001 A01	0.006	0.004	0.008	0.012	0.008
ARKANSAS					
LITTLE ROCK					
041440001 A01	0.0	0.005	0.0	0.006	*****
TEXARKANA					
042550001 A01	0.0	0.0	0.0	0.004	*****
WEST MEMPHIS					
042740001 A01	0.008	0.0	0.003	0.004	0.004
CALIFORNIA					
ANAHEIM					
050230001 A01	0.004	0.0	0.005	0.004	0.003
BURBANK					
050930001 A01	0.003	0.005	0.004	0.005	0.004
FRESNO					
052800001 A01	0.0	0.003	0.004	0.005	0.003
GLENDALE					
052940001 A01	0.0	0.0	0.004	0.004	*****
LONG BEACH					
054100001 A01	0.007	0.004	0.004	0.011	0.006
LOS ANGELES					
054180001 A01	0.006	0.006	0.006	0.006	0.006
OAKLAND					
055300001 A01	0.006	0.009	0.005	0.011	0.007
ONTARIO					
055380001 A01	0.005	0.004	0.007	0.010	0.007
RIVERSIDE					
056400001 A01	0.005	0.005	0.004	0.004	0.005
SACRAMENTO					
056580001 A01	0.003	0.004	0.005	0.005	0.004
SAN BERNARDINO					
056680001 A01	0.006	0.009	0.020	0.016	0.013
SAN DIEGO					
056900001 A01	0.007	0.012	0.015	0.006	0.010
SAN FRANCISCO					
056960001 A01	0.005	0.0	0.0	0.006	*****
SAN JOSE					
056980001 A01	0.003	0.003	0.004	0.005	0.004
SANTA ANA					
057140001 A01	0.0	0.0	0.006	0.005	*****
TORRANCE					
058260001 A01	0.005	0.006	0.0	0.007	0.005
COLORADO					
DENVER					
060590001 A01	0.022	0.015	0.018	0.019	0.018

LOCATION	1ST QTR.	2ND QTR.	3RD QTR.	4TH QTR.	YR. AVG.
COLORADO (CONT)					
MONTEZUMA CO					
061600002 A01	0.0	0.0	0.0	0.0	*****
CONNECTICUT					
BRIDGEPORT					
070060001 A01	0.018	0.008	0.010	0.011	0.012
HARTFORD					
070470001 A01	0.006	0.005	0.006	0.006	0.006
NEW HAVEN					
070700001 A01	0.005	0.007	0.009	0.007	0.007
WATERBURY					
071740001 A01	0.008	0.029	0.020	0.023	0.020
DELAWARE					
WILMINGTON					
080260002 A01	0.025	0.006	0.009	0.017	0.014
DIST COLUMBIA					
WASHINGTON					
090070001 A01	0.010	0.006	0.007	0.008	0.008
FLORIDA					
JACKSONVILLE					
101960002 A01	0.006	0.006	0.003	0.004	0.005
MIAMI					
102700001 A01	0.005	0.007	0.011	0.009	0.008
ST PETERSBURG					
103980002 A01	0.004	0.004	0.003	0.003	0.003
TAMPA					
104360002 A01	0.007	0.006	0.006	0.005	0.006
GEORGIA					
ATLANTA					
110200001 A01	0.006	0.006	0.007	0.011	0.007
COLUMBUS					
111280001 A01	0.0	0.004	0.0	0.0	*****
SAVANNAH					
114500001 A01	0.004	0.005	0.003	0.003	0.004
HAWAII					
HONOLULU					
120120001 A01	0.0	0.0	0.0	0.0	*****
IDAHO					
BOISE CITY					
130220001 A01	0.0	0.0	0.008	0.0	*****
ILLINOIS					
CHICAGO					
141220001 A01	0.015	0.014	0.015	0.015	0.015
EAST ST LOUIS					
142120001 A01	0.045	0.013	0.016	0.015	0.022
JOLIET					
143760001 A01	0.005	0.009	0.008	0.012	0.009
NORTH CHICAGO					
145620002 A01	0.007	0.011	0.006	0.004	0.007
PEORIA					
146040001 A01	0.008	0.011	0.011	0.015	0.011
ROCKFORD					
146680001 A01	0.016	0.013	0.010	0.012	0.013
SPRINGFIELD					
147280001 A01	0.004	0.005	0.005	0.007	0.005
INDIANA					
EAST CHICAGO					
151140001 A01	0.017	0.046	0.027	0.024	0.028
EVANSVILLE					
151300001 A01	0.009	0.007	0.009	0.008	0.008
FORT WAYNE					
151380001 A01	0.015	0.007	0.005	0.005	0.008
GARY					
151520001 A01	0.009	0.008	0.008	0.012	0.009

Table 4-3 (continued). CADMIUM, URBAN QUARTERLY COMPOSITES AND YEARLY AVERAGES, 1969

($\mu g/m^3$)

LOCATION	1ST QTR.	2ND QTR.	3RD QTR.	4TH QTR.	YR. AVG.
INDIANA					
HAMMOND					
181740001 A01	0.010	0.012	0.012	0.010	0.011
INDIANAPOLIS					
182340001 A01	0.025	0.020	0.025	0.011	0.019
NEW ALBANY					
182240001 A01	0.006	0.006	0.005	0.004	0.005
SOUTH BEND					
183940001 A01	0.006	0.006	0.006	0.007	0.006
TERRE HAUTE					
184140001 A01	0.005	0.007	0.005	0.005	0.005
IOWA					
DAVENPORT					
191040001 A01	0.014	0.007	0.010	0.004	0.010
DES MOINES					
191540001 A01	0.005	0.005	0.004	0.005	0.005
DUBUQUE					
191240001 A01	0.014	0.006	0.004	0.013	0.009
KANSAS					
KANSAS CITY					
172640001 A01	0.012	0.007	0.009	0.013	0.010
TOPEKA					
173540001 A01	0.005	0.003	0.004	0.005	0.005
WICHITA					
173740001 A01	0.004	0.006	0.005	0.006	0.005
KENTUCKY					
ASHLAND					
181840001 A01	0.027	0.017	0.024	0.025	0.023
COVINGTON					
180740001 A01	0.007	0.011	0.012	0.012	0.011
LOUISVILLE					
182340001 A01	0.006	0.005	0.006	0.006	0.006
LOUISIANA					
BATON ROUGE					
170739001 A01	0.003	0.003	0.003	0.004	0.003
NEW ORLEANS					
170939001 A01	0.004	0.004	0.005	0.004	0.004
SHREVEPORT					
172740001 A01	0.004	0.004	0.003	0.004	0.004
MARYLAND					
BALTIMORE					
210130001 A01	0.011	0.010	0.009	0.012	0.011
MASSACHUSETTS					
BOSTON					
220743001 A01	0.007	0.008	0.006	0.004	0.006
FALL RIVER					
220540002 A01	0.004	0.003	0.004	0.002	0.003
SPRINGFIELD					
222140001 A01	0.004	0.007	0.004	0.005	0.005
WORCHESTER					
222440001 A01	0.009	0.005	0.004	0.003	0.004
MICHIGAN					
DEARBORN					
231140001 A01	0.010	0.015	0.013	0.007	0.011
DETROIT					
231140002 A01	0.011	0.015	0.014	0.010	0.012
FLINT					
231540001 A01	0.007	0.009	0.006	0.005	0.007
GRAND RAPIDS					
231820001 A01	0.009	0.018	0.009	0.011	0.012
LANSING					
232840001 A01	0.003	0.005	0.003	0.003	0.004
SAGINAW					
234760001 A01	0.005	0.0	0.004	0.003	0.003

LOCATION	1ST QTR.	2ND QTR.	3RD QTR.	4TH QTR.	YR. AVG.
MICHIGAN (CONT)					
TRENTON					
235120001 A01	0.005	0.004	0.004	0.007	0.005
MINNESOTA					
DULUTH					
241340001 A01	0.0	0.0	0.004	0.0	*****
MINNEAPOLIS					
242740001 A01	0.008	0.009	0.005	0.004	0.007
ST PAUL					
243400001 A01	0.008	0.010	0.004	0.003	0.005
MISSOURI					
KANSAS CITY					
262340001 A01	0.010	0.006	0.007	0.006	0.007
ST LOUIS					
264340001 A01	0.013	0.007	0.002	0.003	0.006
MONTANA					
HELENA					
279770001 A01	0.027	0.004	0.005	0.004	0.010
NEBRASKA					
OMAHA					
281440001 A01	0.006	0.005	0.005	0.003	0.004
NEVADA					
LAS VEGAS					
290720001 A01	0.0	0.0	0.0	0.004	*****
RENO					
290440001 A01	0.0	0.0	0.003	0.005	*****
NEW HAMPSHIRE					
CONCORD					
302120001 A01	0.0	0.0	0.0	0.0	*****
NEW JERSEY					
BURLINGTON CO					
313640001 A01	0.003	0.004	0.003	0.006	0.004
ELIZABETH					
311330001 A01	0.009	0.008	0.018	0.013	0.012
GLASSBORO					
312700001 A01	0.010	0.009	0.013	0.009	0.010
HAMILTON					
311940001 A01	0.006	0.006	0.008	0.009	0.007
JERSEY CITY					
312720001 A01	0.014	0.015	0.011	0.010	0.012
NEWARK					
313480001 A01	0.014	0.014	0.024	0.007	0.014
PATERSON					
314740001 A01	0.007	0.004	0.005	0.004	0.004
PERTH AMBOY					
314220001 A01	0.024	0.020	0.017	0.011	0.018
TRENTON					
315400001 A01	0.008	0.010	0.012	0.009	0.010
NEW MEXICO					
ALBUQUERQUE					
320940001 A01	0.0	0.005	0.004	0.007	0.004
NEW YORK					
ALBANY					
330040001 A01	0.004	0.004	0.004	0.0	0.003
BUFFALO					
330440001 A01	0.007	0.006	0.007	0.009	0.007
NEW YORK CITY					
336480001 A01	0.017	0.023	0.004	0.011	0.014
NIAGARA FALLS					
334740001 A01	0.005	0.007	0.007	0.004	0.006
ROCHESTER					
335760001 A01	0.010	0.004	0.009	0.011	0.009
SYRACUSE					
336620001 A01	0.010	0.008	0.009	0.006	0.008

Table 4-3 (continued). CADMIUM, URBAN QUARTERLY COMPOSITES AND YEARLY AVERAGES, 1969

($\mu g/m^3$)

LOCATION	1ST QTR.	2ND QTR.	3RD QTR.	4TH QTR.	YR. AVG.
NEW YORK					
UTICA					
336890001 A01	0.005	0.005	0.0	0.003	0.003
NORTH CAROLINA					
CHARLOTTE					
340700001 A01	0.006	0.004	0.0	0.005	0.004
DURHAM					
341150001 A01	0.003	0.0	0.0	0.0	*****
GREENSBORO					
341740001 A01	0.005	0.004	0.005	0.005	0.005
WINSTON-SALEM					
344460001 A01	0.004	0.005	0.004	0.004	0.005
NORTH DAKOTA					
BISMARCK					
350100001 A01	0.0	0.0	0.0	0.0	*****
OHIO					
AKRON					
360460001 A01	0.008	0.010	0.007	0.003	0.007
CANTON					
361070001 A01	0.006	0.007	0.003	0.004	0.004
CINCINNATI					
361220001 A01	0.016	0.017	0.017	0.013	0.016
CLEVELAND					
361300001 A01	0.017	0.014	0.015	0.014	0.015
COLUMBUS					
361460001 A01	0.015	0.021	0.017	0.008	0.015
DAYTON					
361660001 A01	0.010	0.011	0.008	0.010	0.010
TOLEDO					
366600001 A01	0.005	0.005	0.005	0.005	0.005
YOUNGSTOWN					
367750001 A01	0.014	0.009	0.015	0.012	0.012
OKLAHOMA					
OKLAHOMA CITY					
372200001 A01	0.0	0.0	0.004	0.005	*****
TULSA					
373000001 A01	0.014	0.009	0.006	0.015	0.011
OREGON					
MEDFORD					
381160001 A01	0.0	0.0	0.0	0.004	*****
PORTLAND					
381460001 A01	0.004	0.004	0.003	0.004	0.004
PENNSYLVANIA					
ALLENTOWN					
390120001 A01	0.011	0.023	0.028	0.017	0.020
BETHLEHEM					
390740002 A01	0.022	0.029	0.015	0.027	0.023
ERIE					
393360002 A01	0.008	0.009	0.012	0.007	0.009
HARRISBURG					
393440001 A01	0.004	0.006	0.004	0.004	0.005
HAZLETON					
393960001 A01	0.008	0.004	0.006	0.005	0.005
JOHNSTOWN					
394460001 A01	0.010	0.009	0.009	0.005	0.008
PHILADELPHIA					
397140001 A01	0.013	0.014	0.020	0.015	0.015
PITTSBURGH					
397260001 A01	0.016	0.020	0.013	0.009	0.014
READING					
397420001 A01	0.011	0.012	0.014	0.009	0.011
SCRANTON					
398040001 A01	0.007	0.008	0.009	0.007	0.008
WARMINSTER					
399160001 A01	0.007	0.006	0.005	0.008	0.006
399840001 (CONT)					
WEST CHESTER					
399240001 A01	0.009	0.010	0.010	0.006	0.009
WILKES-BARRE					
399430001 A01	0.004	0.006	0.010	0.012	0.008
YORK					
399560001 A01	0.005	0.007	0.004	0.008	0.006
PUERTO RICO					
BAYAMON					
400380001 A01	0.004	0.006	0.003	0.007	0.006
CATANO					
400560002 A01	0.004	0.0	0.003	0.004	0.003
GUAYANILLA					
401080001 A01	0.0	0.0	0.0	0.0	*****
PONCE					
401920001 A01	0.0	0.0	0.0	0.0	*****
SAN JUAN					
402140001 A01	0.0	0.0	0.005	0.003	*****
RHODE ISLAND					
EAST PROVIDENCE					
41 1200 1 A01	0.007	0.008	0.010	0.007	0.008
PROVIDENCE					
413900001 A01	0.004	0.005	0.005	0.004	0.005
SOUTH CAROLINA					
COLUMBIA					
420760001 A01	0.0	0.003	0.003	0.0	*****
GREENVILLE					
421140001 A01	0.007	0.007	0.008	0.007	0.007
TENNESSEE					
CHATTANOOGA					
440380001 A01	0.010	0.014	0.011	0.011	0.011
KNOXVILLE					
441740001 A01	0.005	0.005	0.0	0.004	0.004
MEMPHIS					
442340001 A01	0.003	0.004	0.003	0.005	0.004
NASHVILLE					
442540001 A01	0.003	0.004	0.003	0.004	0.004
TEXAS					
DALLAS					
451310001 A01	0.005	0.003	0.004	0.008	0.005
EL PASO					
451710001 A01	0.093	0.150	0.057	0.131	0.105
FORT WORTH					
451880001 A01	0.005	0.005	0.0	0.004	0.004
HOUSTON					
452660001 A01	0.0	0.005	0.005	0.005	0.004
PASADENA					
454080001 A01	0.006	0.0	0.0	0.0	*****
SAN ANTONIO					
454570001 A01	0.003	0.0	0.003	0.003	0.003
UTAH					
OGDEN					
466480001 A01	0.006	0.005	0.006	0.012	0.007
SALT LAKE CITY					
467620001 A01	0.003	0.003	0.004	0.016	0.009
VERMONT					
RUTLAND					
472140001 A01	0.005	0.005	0.004	0.006	0.005
VIRGINIA					
DANVILLE					
483620001 A01	0.004	0.004	0.004	0.0	0.003
HAMPTON					
481440001 A01	0.003	0.0	0.005	0.004	0.003

Table 4-3 (continued). CADMIUM, URBAN QUARTERLY COMPOSITES AND YEARLY AVERAGES, 1969

($\mu g/m^3$)

LOCATION	1ST QTR.	2ND QTR.	3RD QTR.	4TH QTR.	YR. AVG.
VIRGINIA					
LYNCHBURG					
491440001 A01	0.008	0.009	0.021	0.011	0.012
NEWPORT NEWS					
492120001 A01	0.006	0.008	0.007	0.009	0.007
NORFOLK					
492140001 A01	0.003	0.005	0.005	0.	0.004
PORTSMOUTH					
492440001 A01	0.009	0.007	0.009	0.007	0.008
RICHMOND					
492560001 A01	0.004	0.004	0.004	0.005	0.004
ROANOKE					
492760001 A01	0.009	0.012	0.013	0.014	0.012
WASHINGTON					
SEATTLE					
531440001 A01	0.005	0.003	0.006	0.019	0.008
SPOKANE					
532040001 A01	0.001	0.0	0.003	0.007	0.004
TACOMA					
532140001 A01	0.005	0.003	0.011	0.016	0.010

LOCATION	1ST QTR.	2ND QTR.	3RD QTR.	4TH QTR.	YR. AVG.
WEST VIRGINIA					
CHARLESTON					
540230001 A01	0.005	0.007	0.006	0.006	0.006
WISCONSIN					
EAU CLAIRE					
511940001 AC1	0.0	0.0	0.003	0.004	*****
KENOSHA					
511540001 A01	0.004	0.010	0.008	0.010	0.008
MADISON					
511850001 A01	0.003	0.004	0.004	0.004	0.004
MILWAUKEE					
512230001 A01	0.006	0.017	0.010	0.008	0.010
RACINE					
512890001 A01	0.007	0.005	0.005	0.007	0.006
SUPERIOR					
513490001 A01	0.004	0.0	0.004	0.003	0.003
WYOMING					
CASPER					
520120001 A01	0.0	0.0	0.0	0.0	*****
CHEYENNE					
520140001 A01	0.004	0.004	0.005	0.006	0.005

Table 4-4. CADMIUM, NONURBAN QUARTERLY COMPOSITES AND YEARLY AVERAGES, 1969

($\mu g/m^3$)

LOCATION	1ST QTR.	2ND QTR.	3RD QTR.	4TH QTR.	YR. AVG.
ARIZONA					
GRAND CANYON NAT P					
030370001 A03	.0	.0	.0	.0	*****
ARKANSAS					
MONTGOMERY CO					
041760001 A03	.0	.0	.0	.0	*****
CALIFORNIA					
HUMBOLDT CO					
060230001 A03	.0	.0	.0	.0	*****
FLORIDA					
HARDEE CO					
101580001 A03	.0	.0	.0	.0	*****
IDAHO					
BUTTE CO					
130360001 A03	.0	.0	.0	.0	*****
INDIANA					
MONROE CO					
152930001 A03	.0	.0	.0	.0	*****
PARKE CO					
153260001 A03	.0	.0	.0	.0	*****
MAINE					
ACADIA NAT PARK					
200610001 A03	.0	.0	.0	.0	*****
MARYLAND					
CALVERT CO					
210790001 A03	.0	.0	.0	.0	*****
MISSOURI					
SHANNON CO					
266490002 A03	.0	.0	.0	.0	*****
MONTANA					
GLACIER NAT PARK					
270570001 A03	.0	.0	.0	.0	*****
NEBRASKA					
THOMAS CO					
282480001 A03	.0	.0	.0	.0	*****
NEVADA					
WHITE PINE CO					
290760001 A03	.0	.0	.0	.0	*****
NEW HAMPSHIRE					
COOS CO					
330140001 A03	.0	.0	.0	.0	*****
NEW YORK					
JEFFERSON CO					
333470001 A03	.0	.0	.0	.0	*****
NORTH CAROLINA					
CAPE HATTERAS NAT					
340530001 A03	.0	.0	.0	.0	*****
OKLAHOMA					
CHEROKEE CO					
370480001 A03	.0	.0	.0	.0	*****
OREGON					
CURRY CO					
380460001 A03	.0	.0	.0	.0	*****
PENNSYLVANIA					
CLARION CO					
391760001 A03	.0	.0	.0	.0	*****
RHODE ISLAND					
WASHINGTON CO					
410380002 A03	.0	.0	.0	.0	*****
SOUTH CAROLINA					
RICHLAND CO					
421990001 A03	.0	.0	.0	.0	*****
SOUTH DAKOTA					
BLACK HILLS NAT FO					
430110001 A03	.0	.0	.0	.0	*****
TENNESSEE					
CUMBERLAND CO					
440690001 A03	.0	.0	.0	.0	*****
TEXAS					
MATAGORDA CO					
453530001 A03	.0	.0	.0	.0	*****
VERMONT					
ORANGE CO					
470360001 A03	.0	.0	.0	.0	*****
VIRGINIA					
SHENANDOAH NAT PAR					
482990001 A03	.0	.0	.0	.0	*****
WYTHE CO					
483440001 A03	.0	.0	.0	.0	*****
WISCONSIN					
DOOR CO					
510790001 A03	.0	.0	.0	.0	*****
WYOMING					
YELLOWSTONE NAT PA					
520860001 A03	.0	.0	.0	.0	*****

SECTION 5. URBAN AND NONURBAN METALS IN SUSPENDED PARTICULATES: CHROMIUM

Table 5-1. CHROMIUM, URBAN FREQUENCY DISTRIBUTIONS, 1968

($\mu g/m^3$)

LOCATION	NO. SAMP.	MIN.	FREQUENCY DISTRIBUTION, %									MAX.	ARITHMETIC MEAN	ARITHMETIC STD. DEV.	GEOMETRIC MEAN	GEOMETRIC STD. DEV.
			10	20	30	40	50	60	70	80	90					
ALABAMA																
OAKSDEN																
011440001 A01	25	10.0	NO. OF SAMPLES (14) BELOW MIN. DET. EXCEEDS 50%									0.100				
HUNTSVILLE																
011460001 A01	25	10.0	NO. OF SAMPLES (17) BELOW MIN. DET. EXCEEDS 50%									0.036				
MOBILE																
012340301 A01	25	0.0	0.0	0.0	0.0	0.0	0.011	0.012	0.016	0.019	0.036	0.360				
MONTGOMERY																
012460301 A01	25	0.0	NO. OF SAMPLES (19) BELOW MIN. DET. EXCEEDS 50%									0.020				
ALASKA																
ANCHORAGE																
020430001 A01	26	0.0	NO. OF SAMPLES (19) BELOW MIN. DET. EXCEEDS 50%									0.027				
FAIRBANKS																
020140101 A01	24	0.0	NO. OF SAMPLES (17) BELOW MIN. DET. EXCEEDS 50%									0.047				
ARIZONA																
MARICOPA CO.																
030440301 A01	25	0.0	NO. OF SAMPLES (19) BELOW MIN. DET. EXCEEDS 50%									0.030				
PHOENIX																
030610302 A01	24	0.0	NO. OF SAMPLES (13) BELOW MIN. DET. EXCEEDS 50%									0.043				
TUCSON																
030840301 A01	24	0.0	NO. OF SAMPLES (19) BELOW MIN. DET. EXCEEDS 50%									0.024				
ARKANSAS																
LITTLE ROCK																
040440301 A01	25	0.0	NO. OF SAMPLES (19) BELOW MIN. DET. EXCEEDS 50%									0.023				
TEXARKANA																
040560301 A01	25	0.0	0.0	0.0	0.0	0.007	0.009	0.009	0.014	0.019	0.023	0.035				
WEST MEMPHIS																
040740501 A01	26	0.0	0.0	0.0	0.0	0.008	0.009	0.010	0.012	0.025	0.045	0.076				
CALIFORNIA																
BURBANK																
040940301 A01	26	0.0	0.0	0.0	0.009	0.011	0.015	0.019	0.022	0.029	0.037	0.049	0.017	0.011	0.012	2.49
GLENDALE																
040940301 A01	25	0.0	NO. OF SAMPLES (14) BELOW MIN. DET. EXCEEDS 50%									0.044				
LONG BEACH																
041130301 A01	26	0.0	0.0	0.0	0.0	0.0	0.009	0.015	0.019	0.021	0.035	0.053				
LOS ANGELES																
041140301 A01	26	0.0	0.0	0.0	0.009	0.013	0.013	0.016	0.021	0.036	0.042	0.057				
OAKLAND																
041[illegible] A01	25	0.0	0.0	0.0	0.0	0.0	0.009	0.013	0.018	0.021	0.046	0.075				
[illegible]																
041440301 A01	24	0.0	0.0	0.0	0.0	0.0	0.009	0.011	0.012	0.017	0.032	0.041				
PASADENA																
041940101 A01	25	0.0	0.0	0.0	0.0	0.0	0.014	0.014	0.019	0.023	0.030	0.366				
RIVERSIDE																
042440001 A01	26	0.0	0.0	0.0	0.0	0.008	0.010	0.016	0.022	0.027	0.042	0.240				
SACRAMENTO																
042540001 A01	26	0.0	NO. OF SAMPLES (17) BELOW MIN. DET. EXCEEDS 50%									0.040				
SAN BERNARDINO																
042640101 A01	26	0.0	0.0	0.0	0.0	0.0	0.010	0.011	0.016	0.018	0.028	0.038				
SAN DIEGO																
042800001 A01	26	0.0	0.0	0.0	0.0	0.009	0.011	0.013	0.020	0.020	0.027	0.050				
SAN FRANCISCO																
042860001 A01	26	0.0	NO. OF SAMPLES (18) BELOW MIN. DET. EXCEEDS 50%									0.030				
COLORADO																
DENVER																
060580001 A01	24	0.0	NO. OF SAMPLES (13) BELOW MIN. DET. EXCEEDS 50%									0.045				
CONNECTICUT																
HARTFORD																
070420001 A01	26	0.0	NO. OF SAMPLES (15) BELOW MIN. DET. EXCEEDS 50%									0.031				
NEW HAVEN																
070700001 A01	26	0.0	0.0	0.0	0.0	0.0	0.0	0.010	0.018	0.021	0.032	0.078				
DELAWARE																
NEWARK																
080140001 A01	24	0.0	NO. OF SAMPLES (19) BELOW MIN. DET. EXCEEDS 50%									0.022				
WILMINGTON																
080260001 A01	23	0.0	NO. OF SAMPLES (12) BELOW MIN. DET. EXCEEDS 50%									0.080				

Table 5-1 (continued). CHROMIUM, URBAN FREQUENCY DISTRIBUTIONS, 1968

($\mu g/m^3$)

LOCATION	NO. SAMP.	MIN.	FREQUENCY DISTRIBUTION, %									MAX.	ARITHMETIC		GEOMETRIC	
			10	20	30	40	50	60	70	80	90		MEAN	STD. DEV.	MEAN	STD. DEV.
DIST COLUMBIA																
WASHINGTON																
090320001 A01	24	0.0	NO. OF SAMPLES (19) BELOW MIN. DET. EXCEEDS 50%									0.030				
FLORIDA																
JACKSONVILLE																
121540002 A01	25	0.0	NO. OF SAMPLES (18) BELOW MIN. DET. EXCEEDS 50%									0.040				
FLORIDA																
TAMPA																
106400002 A01	25	0.0	0.0	0.0	0.0	0.009	0.010	0.011	0.014	0.027	0.031	0.059				
GEORGIA																
ATLANTA																
110700001 A01	26	0.0	0.0	0.0	0.004	0.010	0.011	0.013	0.021	0.038	0.062	0.081	0.021	0.02	0.013	2.84
HAWAII																
HONOLULU																
120120001 A01	25	0.0	NO. OF SAMPLES (13) BELOW MIN. DET. EXCEEDS 50%									0.260				
IDAHO																
BOISE CITY																
130230001 A01	26	0.0	0.0	0.0	0.0	0.008	0.009	0.010	0.012	0.015	0.024	0.053				
ILLINOIS																
CHICAGO																
141220001 A01	25	0.0	0.011	0.011	0.012	0.013	0.016	0.017	0.029	0.036	0.043	0.055	0.023	0.01	0.018	2.16
EAST ST LOUIS																
149125001 A01	25	0.0	0.0	0.0	0.0	0.0	0.010	0.011	0.013	0.017	0.022	0.047				
JOLIET																
149750001 A01	21	0.0	NO. OF SAMPLES (14) BELOW MIN. DET. EXCEEDS 50%									0.027				
ROCKFORD																
166490001 A01	25	0.0	0.0	0.0	0.0	0.0	0.011	0.015	0.020	0.025	0.029	0.057				
SPRINGFIELD																
167740001 A01	24	0.0	NO. OF SAMPLES (17) BELOW MIN. DET. EXCEEDS 50%									0.044				
INDIANA																
EAST CHICAGO																
151140001 A01	26	0.004	0.015	0.019	0.021	0.026	0.031	0.043	0.049	0.054	0.072	0.096	0.037	0.02	0.031	1.91
HAMMOND																
151740001 A01	26	0.0	0.0	0.0	0.0	0.0	0.010	0.013	0.016	0.025	0.043	0.066				
INDIANAPOLIS																
152040001 A01	25	0.0	0.0	0.010	0.011	0.012	0.013	0.014	0.018	0.023	0.039	0.041	0.017	0.01	0.014	2.03
SOUTH BEND																
153440001 A01	24	0.0	0.0	0.0	0.009	0.011	0.013	0.013	0.024	0.034	0.038	0.050				
IOWA																
CEDAR RAPIDS																
160640001 A01	26	0.0	NO. OF SAMPLES (14) BELOW MIN. DET. EXCEEDS 50%									0.079				
DES MOINES																
161140001 A01	26	0.0	NO. OF SAMPLES (19) BELOW MIN. DET. EXCEEDS 50%									0.030				
DUBUQUE																
161260001 A01	23	0.0	NO. OF SAMPLES (16) BELOW MIN. DET. EXCEEDS 50%									0.030				
KANSAS																
KANSAS CITY																
171400001 A01	25	0.0	0.0	0.0	0.0	0.0	0.010	0.011	0.019	0.025	0.027	0.053				
TOPEKA																
173560001 A01	26	0.0	NO. OF SAMPLES (17) BELOW MIN. DET. EXCEEDS 50%									0.045				
WICHITA																
173740001 A01	25	0.0	NO. OF SAMPLES (17) BELOW MIN. DET. EXCEEDS 50%									0.031				
KENTUCKY																
ASHLAND																
180040002 A01	23	0.0	0.0	0.0	0.0	0.010	0.012	0.021	0.030	0.039	0.065	0.170				
COVINGTON																
180400001 A01	25	0.0	0.0	0.0	0.0	0.008	0.010	0.015	0.017	0.025	0.034	0.044				
LEXINGTON																
182330001 A01	24	0.0	NO. OF SAMPLES (16) BELOW MIN. DET. EXCEEDS 50%									0.029				
LOUISVILLE																
182580001 A01	25	0.0	0.0	0.0	0.0	0.0	0.011	0.013	0.032	0.034	0.047	0.064				
LOUISIANA																
NEW ORLEANS																
192020002 A01	25	0.0	0.0	0.0	0.015	0.023	0.027	0.028	0.030	0.034	0.059	0.092				
MAINE																
PORTLAND																
200960002 A01	21	0.0	NO. OF SAMPLES (12) BELOW MIN. DET. EXCEEDS 50%									0.041				
MARYLAND																
BALTIMORE																
210120001 A01	26	0.0	0.010	0.014	0.017	0.020	0.026	0.046	0.069	0.084	0.120	0.230	0.051	0.05	0.031	3.01

Table 5-1 (continued). CHROMIUM, URBAN FREQUENCY DISTRIBUTIONS, 1968

($\mu g/m^3$)

LOCATION	NO. SAMP.	MIN.	FREQUENCY DISTRIBUTION, %									MAX.	ARITHMETIC		GEOMETRIC	
			10	20	30	40	50	60	75	90	95		MEAN	STD. DEV.	MEAN	STD. DEV.
MASSACHUSETTS																
BOSTON																
220740001 A01	25	0.0	0.0	0.0	0.0	0.010	0.011	0.012	0.016	0.022	0.029	0.030				
WORCHESTER																
222440001 A01	24	0.0	NO. OF SAMPLES (19) BELOW MIN. DET. EXCEEDS 50%									0.064				
MICHIGAN																
DETROIT																
231140001 A01	26	0.0	0.0	0.008	0.009	0.012	0.016	0.021	0.025	0.068	0.097	0.260	0.042	0.061	0.019	3.52
FLINT																
233540001 A01	26	0.0	NO. OF SAMPLES (19) BELOW MIN. DET. EXCEEDS 50%									0.077				
GRAND RAPIDS																
234420001 A01	26	0.0	NO. OF SAMPLES (17) BELOW MIN. DET. EXCEEDS 50%									0.046				
TRENTON																
235120001 A01	25	0.0	0.0	0.0	0.0	0.0	0.009	0.011	0.013	0.014	0.020	0.068				
MINNESOTA																
DULUTH																
241040001 A01	23	0.0	NO. OF SAMPLES (21) BELOW MIN. DET. EXCEEDS 50%									0.013				
MINNEAPOLIS																
242240001 A01	26	0.0	0.0	0.0	0.0	0.008	0.009	0.010	0.011	0.012	0.021	0.030				
MOORHEAD																
242920001 A01	26	0.0	NO. OF SAMPLES (23) BELOW MIN. DET. EXCEEDS 50%									0.020				
ST PAUL																
243330001 A01	24	0.0	NO. OF SAMPLES (19) BELOW MIN. DET. EXCEEDS 50%									0.045				
MISSISSIPPI																
JACKSON																
251240001 A01	24	0.0	NO. OF SAMPLES (20) BELOW MIN. DET. EXCEEDS 50%									0.043				
MISSOURI																
KANSAS CITY																
262340001 A01	24	0.0	NO. OF SAMPLES (23) BELOW MIN. DET. EXCEEDS 50%									0.014				
MONTANA																
HELENA																
270720001 A01	24	0.0	NO. OF SAMPLES (20) BELOW MIN. DET. EXCEEDS 50%									0.023				
NEBRASKA																
OMAHA																
281940001 A01	25	0.0	NO. OF SAMPLES (19) BELOW MIN. DET. EXCEEDS 50%									0.044				
NEVADA																
LAS VEGAS																
290320001 A01	24	0.0	NO. OF SAMPLES (20) BELOW MIN. DET. EXCEEDS 50%									0.560				
RENO																
290490001 A01	25	0.0	NO. OF SAMPLES (21) BELOW MIN. DET. EXCEEDS 50%									0.032				
NEW HAMPSHIRE																
CONCORD																
300120001 A01	25	0.0	NO. OF SAMPLES (20) BELOW MIN. DET. EXCEEDS 50%									0.027				
NEW JERSEY																
BAYONNE																
310140001 A01	21	0.0	0.0	0.0	0.0	0.009	0.011	0.020	0.033	0.050	0.100	0.180				
BURLINGTON CO																
310660002 A01	25	0.0	NO. OF SAMPLES (17) BELOW MIN. DET. EXCEEDS 50%									0.025				
CAMDEN																
310720001 A01	26	0.0	0.0	0.0	0.0	0.009	0.011	0.014	0.015	0.016	0.018	0.044				
GLASSBORO																
311700001 A01	25	0.0	NO. OF SAMPLES (19) BELOW MIN. DET. EXCEEDS 50%									0.013				
HAMILTON																
311940001 A01	21	0.0	NO. OF SAMPLES (17) BELOW MIN. DET. EXCEEDS 50%									0.024				
JERSEY CITY																
312320001 A01	25	0.0	0.0	0.0	0.0	0.010	0.015	0.020	0.031	0.036	0.070	0.160				
NEWARK																
313480001 A01	24	0.0	0.0	0.0	0.0	0.007	0.013	0.014	0.019	0.022	0.049	0.097				
PATERSON																
314140001 A01	25	0.0	NO. OF SAMPLES (17) BELOW MIN. DET. EXCEEDS 50%									0.043				
PERTH AMBOY																
314220001 A01	26	0.0	NO. OF SAMPLES (17) BELOW MIN. DET. EXCEEDS 50%									0.032				
TRENTON																
315400001 A01	24	0.0	NO. OF SAMPLES (22) BELOW MIN. DET. EXCEEDS 50%									0.018				
NEW MEXICO																
ALBUQUERQUE																
320340001 A01	24	0.0	NO. OF SAMPLES (22) BELOW MIN. DET. EXCEEDS 50%									0.011				

Table 5-1 (continued). CHROMIUM, URBAN FREQUENCY DISTRIBUTIONS, 1968

($\mu g/m^3$)

LOCATION	NO. SAMP.	MIN.	FREQUENCY DISTRIBUTION, % 10	20	30	40	50	60	70	80	90	MAX.	ARITHMETIC MEAN	ARITHMETIC STD. DEV.	GEOMETRIC MEAN	GEOMETRIC STD. DEV.
NORTH CAROLINA																
CHARLOTTE																
340750001 A01	25	0.0	NO. OF SAMPLES < 10% BELOW MIN. DET. EXCEEDS 50%									0.039				
DURHAM																
341160001 A01	23	0.0	NO. OF SAMPLES < 10% BELOW MIN. DET. EXCEEDS 50%									0.053				
NORTH DAKOTA																
BISMARCK																
350100001 A01	25	0.0	NO. OF SAMPLES < 10% BELOW MIN. DET. EXCEEDS 50%									0.041				
OHIO																
AKRON																
360230001 A01	25	0.0	NO. OF SAMPLES < 10% BELOW MIN. DET. EXCEEDS 50%									0.051				
CINCINNATI																
361230001 A01	26	0.0	0.0	0.0	0.013	0.014	0.015	0.018	0.022	0.029	0.043	0.120				
CLEVELAND																
361330001 A01	26	0.0	NO. OF SAMPLES < 10% BELOW MIN. DET. EXCEEDS 50%									0.054				
COLUMBUS																
361430001 A01	24	0.0	NO. OF SAMPLES < 10% BELOW MIN. DET. EXCEEDS 50%									0.024				
DAYTON																
361660001 A01	24	0.0	NO. OF SAMPLES < 10% BELOW MIN. DET. EXCEEDS 50%									0.033				
TOLEDO																
366030001 A01	23	0.0	NO. OF SAMPLES < 10% BELOW MIN. DET. EXCEEDS 50%									0.037				
YOUNGSTOWN																
367760001 A01	25	0.0	0.0	0.009	0.010	0.011	0.016	0.018	0.024	0.033	0.096	0.490	0.045	0.10	0.018	3.27
OKLAHOMA																
OKLAHOMA CITY																
372230027 A01	22	0.0	NO. OF SAMPLES < 10% BELOW MIN. DET. EXCEEDS 50%									0.016				
TULSA																
373000001 A01	24	0.0	NO. OF SAMPLES < 10% BELOW MIN. DET. EXCEEDS 50%									0.0				
OREGON																
MEDFORD																
381140001 A01	25	0.0	NO. OF SAMPLES < 10% BELOW MIN. DET. EXCEEDS 50%									0.033				
PORTLAND																
384640001 A01	26	0.0	NO. OF SAMPLES < 10% BELOW MIN. DET. EXCEEDS 50%									0.070				
PENNSYLVANIA																
ALLENTOWN																
390120001 A01	26	0.0	0.0	0.0	0.0	0.0	0.0	0.013	0.017	0.019	0.027	0.035				
ALTOONA																
390140001 A01	23	0.0	NO. OF SAMPLES < 10% BELOW MIN. DET. EXCEEDS 50%									0.022				
BETHLEHEM																
390780002 A01	24	0.0	0.0	0.0	0.0	0.008	0.010	0.019	0.029	0.045	0.047	0.140				
HARRISBURG																
393480001 A01	26	0.0	0.008	0.010	0.013	0.023	0.025	0.029	0.034	0.036	0.057	0.110	0.028	0.02	0.021	2.35
HAZLETON																
393360001 A01	24	0.0	NO. OF SAMPLES < 10% BELOW MIN. DET. EXCEEDS 50%									0.047				
JOHNSTOWN																
394480001 A01	23	0.0	0.008	0.010	0.012	0.019	0.025	0.031	0.042	0.055	0.065	0.130	0.035	0.03	0.024	2.58
PHILADELPHIA																
397140001 A01	26	0.0	0.0	0.0	0.0	0.0	0.011	0.013	0.023	0.031	0.041	0.056				
PITTSBURGH																
397260001 A01	26	0.007	0.013	0.019	0.022	0.032	0.041	0.050	0.054	0.060	0.130	0.160	0.049	0.04	0.037	2.17
READING																
397620001 A01	25	0.0	0.0	0.009	0.014	0.017	0.030	0.035	0.069	0.110	0.130	0.430	0.063	0.09	0.028	3.98
SCRANTON																
398040001 A01	25	0.0	0.0	0.0	0.0	0.0	0.010	0.011	0.016	0.021	0.036	0.078				
WARMINSTER																
399160001 A01	25	0.0	NO. OF SAMPLES < 10% BELOW MIN. DET. EXCEEDS 50%									0.140				
WEST CHESTER																
399760001 A01	24	0.0	NO. OF SAMPLES < 10% BELOW MIN. DET. EXCEEDS 50%									0.020				
WILKES-BARRE																
399430001 A01	24	0.0	NO. OF SAMPLES < 10% BELOW MIN. DET. EXCEEDS 50%									0.027				
YORK																
399560001 A01	25	0.0	NO. OF SAMPLES < 10% BELOW MIN. DET. EXCEEDS 50%									0.030				
PUERTO RICO																
BAYAMON																
400380001 A01	25	0.0	NO. OF SAMPLES < 10% BELOW MIN. DET. EXCEEDS 50%									0.019				
CATANO																
400560001 A01	25	0.0	NO. OF SAMPLES < 10% BELOW MIN. DET. EXCEEDS 50%									0.022				

Table 5-1 (continued). CHROMIUM, URBAN FREQUENCY DISTRIBUTIONS, 1968

($\mu g/m^3$)

LOCATION	NO. SAMP.	MIN.	FREQUENCY DISTRIBUTION, %									MAX.	ARITHMETIC MEAN	ARITHMETIC STD. DEV.	GEOMETRIC MEAN	GEOMETRIC STD. DEV.
			10	20	30	40	50	60	70	80	90					
PUERTO RICO																
GUAYANILLA 401040001 A01	25	0.0	NO. OF SAMPLES (16) BELOW MIN. DET. EXCEEDS 50%									0.027				
PONCE 401920001 A01	25	0.0	NO. OF SAMPLES (16) BELOW MIN. DET. EXCEEDS 50%									0.029				
RHODE ISLAND																
EAST PROVIDENCE 410120001 A01	26	0.0	NO. OF SAMPLES (19) BELOW MIN. DET. EXCEEDS 50%									0.028				
PROVIDENCE 410400001 A01	25	0.0	NO. OF SAMPLES (16) BELOW MIN. DET. EXCEEDS 50%									0.045				
SOUTH CAROLINA																
COLUMBIA 420750001 A01	24	0.0	NO. OF SAMPLES (18) BELOW MIN. DET. EXCEEDS 50%									0.041				
GREENVILLE 421140001 A01	25	0.0	NO. OF SAMPLES (19) BELOW MIN. DET. EXCEEDS 50%									0.029				
SOUTH DAKOTA																
SIOUX FALLS 431490001 A01	22	0.0	NO. OF SAMPLES (16) BELOW MIN. DET. EXCEEDS 50%									0.034				
TENNESSEE																
CHATTANOOGA 440340001 A01	25	0.0	0.0	0.0	0.010	0.013	0.014	0.018	0.021	0.029	0.030	0.051	0.017	0.011	0.013	2.33
KNOXVILLE 441740001 A01	24	0.0	NO. OF SAMPLES (20) BELOW MIN. DET. EXCEEDS 50%									0.034				
MEMPHIS 442340001 A01	25	0.0	NO. OF SAMPLES (20) BELOW MIN. DET. EXCEEDS 50%									0.067				
NASHVILLE 442540001 A01	25	0.0	NO. OF SAMPLES (18) BELOW MIN. DET. EXCEEDS 50%									0.037				
TEXAS																
DALLAS 451310002 A01	26	0.0	NO. OF SAMPLES (17) BELOW MIN. DET. EXCEEDS 50%									0.090				
HOUSTON 452563001 A01	24	0.0	NO. OF SAMPLES (15) BELOW MIN. DET. EXCEEDS 50%									0.067				
PASADENA 452660001 A01	26	0.0	NO. OF SAMPLES (16) BELOW MIN. DET. EXC[illegible] 50%									0.047				
SAN ANTONIO 454670001 A01	25	0.0	NO. OF SAMPLES (19) BELOW MIN. DET. EXC[illegible] 50%									0.067				
UTAH																
OGDEN 460690001 A01	25	0.0	NO. OF SAMPLES (21) BELOW MIN. DET. EXCEEDS 50%									0.031				
SALT LAKE CITY 460920001 A01	26	0.0	NO. OF SAMPLES (16) BELOW MIN. DET. EXCEEDS 50%									0.048				
VERMONT																
BURLINGTON 470140001 A01	24	0.0	NO. OF SAMPLES (18) BELOW MIN. DET. EXCEEDS 50%									0.021				
VIRGINIA																
DANVILLE 480370001 A01	25	0.0	NO. OF SAMPLES (17) BELOW MIN. DET. EXCEEDS 50%									0.032				
HAMPTON 481440301 A01	25	0.0	NO. OF SAMPLES (19) BELOW MIN. DET. EXCEEDS 50%									0.044				
LYNCHBURG 481940001 A01	24	0.0	NO. OF SAMPLES (19) BELOW MIN. DET. EXCEEDS 50%									0.025				
NORFOLK 482140001 A01	24	0.0	NO. OF SAMPLES (18) BELOW MIN. DET. EXCEEDS 50%									0.024				
PORTSMOUTH 482440001 A01	26	0.0	NO. OF SAMPLES (20) BELOW MIN. DET. EXCEEDS 50%									0.014				
RICHMOND 482660001 A01	24	0.0	NO. OF SAMPLES (20) BELOW MIN. DET. EXCEEDS 50%									0.033				
ROANOKE 482700001 A01	25	0.0	NO. OF SAMPLES (18) BELOW MIN. DET. EXCEEDS 50%									0.023				
WASHINGTON																
SEATTLE 491460001 A01	24	0.0	NO. OF SAMPLES (22) BELOW MIN. DET. EXCEEDS 50%									0.021				
WEST VIRGINIA																
CHARLESTON 500280001 A01	24	0.0	0.0	0.0	0.0	0.0	0.014	0.018	0.047	0.054	0.160	0.500				
WISCONSIN																
EAU CLAIRE 510440001 A01	24	0.0	NO. OF SAMPLES (22) BELOW MIN. DET. EXCEEDS 50%									0.012				

Table 5-1 (continued). CHROMIUM, URBAN FREQUENCY DISTRIBUTIONS, 1968

($\mu g/m^3$)

LOCATION	% SAMP.	MIN.	FREQUENCY DISTRIBUTION, %									MAX.	ARITHMETIC		GEOMETRIC	
			10	20	30	40	50	60	70	80	90		MEAN	STD. DEV.	MEAN	STD. DEV.
WISCONSIN																
MENOMA																
551540001 A01	24	10.0	NO. OF SAMPLES < 173 BELOW MIN. DET. EXCEEDS 50%									0.022				
MADISON																
551960001 A01	26	10.0	NO. OF SAMPLES < 233 BELOW MIN. DET. EXCEEDS 50%									0.010				
MILWAUKEE																
552260001 A01	24	10.0	10.0	10.0	10.0	10.0	10.009	0.010	0.014	0.017	0.020	0.022				
SUPERIOR																
553460001 A01	23	10.0	NO. OF SAMPLES < 173 BELOW MIN. DET. EXCEEDS 50%									0.022				
WYOMING																
CASPER																
560120001 A01	26	10.0	NO. OF SAMPLES < 223 BELOW MIN. DET. EXCEEDS 50%									0.021				
CHEYENNE																
560240001 A01	26	10.0	NO. OF SAMPLES < 263 BELOW MIN. DET. EXCEEDS 50%									10.0				

Table 5-2. CHROMIUM, NONURBAN FREQUENCY DISTRIBUTIONS, 1968

($\mu g/m^3$)

LOCATION	NO. SAMP.	MIN.	FREQUENCY DISTRIBUTION, %									MAX.	ARITHMETIC MEAN	ARITHMETIC STD. DEV.	GEOMETRIC MEAN	GEOMETRIC STD. DEV.
			10	20	30	40	50	60	70	80	90					
ARIZONA																
[illegible]	26	10.0	NO. OF SAMPLES (26) BELOW MIN. DET. EXCEEDS 50%									10.0				
ARKANSAS																
[illegible]	26	10.0	NO. OF SAMPLES (26) BELOW MIN. DET. EXCEEDS 50%									10.0				
CALIFORNIA																
[illegible]	26	10.0	NO. OF SAMPLES (26) BELOW MIN. DET. EXCEEDS 50%									10.0				
COLORADO																
[illegible]	26	10.0	NO. OF SAMPLES (26) BELOW MIN. DET. EXCEEDS 50%									10.000				
DELAWARE																
[illegible]	26	10.0	NO. OF SAMPLES (26) BELOW MIN. DET. EXCEEDS 50%									10.0				
FLORIDA																
[illegible]	26	10.0	NO. OF SAMPLES (26) BELOW MIN. DET. EXCEEDS 50%									10.0				
GEORGIA																
[illegible]	26	10.0	NO. OF SAMPLES (26) BELOW MIN. DET. EXCEEDS 50%									10.0				
HAWAII																
[illegible]	26	10.0	NO. OF SAMPLES (26) BELOW MIN. DET. EXCEEDS 50%									10.0				
IDAHO																
[illegible]	26	10.0	NO. OF SAMPLES (26) BELOW MIN. DET. EXCEEDS 50%									10.0				
ILLINOIS																
[illegible]	26	10.0	NO. OF SAMPLES (26) BELOW MIN. DET. EXCEEDS 50%									10.0				
INDIANA																
[illegible]	26	10.0	NO. OF SAMPLES (26) BELOW MIN. DET. EXCEEDS 50%									10.0				
IOWA																
[illegible]	26	10.0	NO. OF SAMPLES (26) BELOW MIN. DET. EXCEEDS 50%									10.0				
KANSAS																
[illegible]	26	10.0	NO. OF SAMPLES (26) BELOW MIN. DET. EXCEEDS 50%									10.0				
KENTUCKY																
[illegible]	26	10.0	NO. OF SAMPLES (26) BELOW MIN. DET. EXCEEDS 50%									10.0				
LOUISIANA																
[illegible]	26	10.0	NO. OF SAMPLES (26) BELOW MIN. DET. EXCEEDS 50%									10.0				
MAINE																
[illegible]	26	10.0	NO. OF SAMPLES (26) BELOW MIN. DET. EXCEEDS 50%									10.0				
MARYLAND																
[illegible]	26	10.0	NO. OF SAMPLES (26) BELOW MIN. DET. EXCEEDS 50%									10.0				
MASSACHUSETTS																
[illegible]	26	10.0	NO. OF SAMPLES (26) BELOW MIN. DET. EXCEEDS 50%									10.0				
MICHIGAN																
[illegible]	26	10.0	NO. OF SAMPLES (26) BELOW MIN. DET. EXCEEDS 50%									10.0				
MINNESOTA																
[illegible]	26	10.0	NO. OF SAMPLES (26) BELOW MIN. DET. EXCEEDS 50%									10.0				
MISSISSIPPI																
[illegible]	26	10.0	NO. OF SAMPLES (26) BELOW MIN. DET. EXCEEDS 50%									10.0				
MISSOURI																
[illegible]	26	10.0	NO. OF SAMPLES (26) BELOW MIN. DET. EXCEEDS 50%									10.0				
MONTANA																
[illegible]	26	10.0	NO. OF SAMPLES (26) BELOW MIN. DET. EXCEEDS 50%									10.0				
NEBRASKA																
[illegible]	26	10.0	NO. OF SAMPLES (26) BELOW MIN. DET. EXCEEDS 50%									10.0				
NEVADA																
[illegible]	26	10.0	NO. OF SAMPLES (26) BELOW MIN. DET. EXCEEDS 50%									10.0				
NEW HAMPSHIRE																
[illegible]	26	10.0	NO. OF SAMPLES (26) BELOW MIN. DET. EXCEEDS 50%									10.0				
NEW YORK																
[illegible]	26	10.0	NO. OF SAMPLES (26) BELOW MIN. DET. EXCEEDS 50%									10.0				
NORTH CAROLINA																
[illegible]	26	10.0	NO. OF SAMPLES (26) BELOW MIN. DET. EXCEEDS 50%									10.0				
OKLAHOMA																
[illegible]	26	10.0	NO. OF SAMPLES (26) BELOW MIN. DET. EXCEEDS 50%									10.0				
OREGON																
[illegible]	26	10.0	NO. OF SAMPLES (26) BELOW MIN. DET. EXCEEDS 50%									10.0				
PENNSYLVANIA																
[illegible]	26	10.0	NO. OF SAMPLES (26) BELOW MIN. DET. EXCEEDS 50%									10.0				
RHODE ISLAND																
[illegible]	26	10.0	NO. OF SAMPLES (26) BELOW MIN. DET. EXCEEDS 50%									10.0				
SOUTH CAROLINA																
[illegible]	23	10.0	NO. OF SAMPLES (23) BELOW MIN. DET. EXCEEDS 50%									10.0				
SOUTH DAKOTA																
[illegible]	26	10.0	NO. OF SAMPLES (26) BELOW MIN. DET. EXCEEDS 50%									10.0				

Table 5-2 (continued). CHROMIUM, NONURBAN FREQUENCY DISTRIBUTIONS, 1968
($\mu g/m^3$)

LOCATION	NO. SAMP.	MIN.	FREQUENCY DISTRIBUTION, % 10	20	30	40	50	60	70	80	90	MAX.	ARITHMETIC MEAN	ARITHMETIC STD. DEV.	GEOMETRIC MEAN	GEOMETRIC STD. DEV.
TEXAS MATAGORDA CO 453540001 A01	25	0.0	NO. OF SAMPLES (25) BELOW MIN. DET. EXCEEDS 50%									0.0				
VERMONT ORANGE CO 470360001 A01	26	0.0	NO. OF SAMPLES (26) BELOW MIN. DET. EXCEEDS 50%									0.0				
VIRGINIA SHENANDOAH NAT PARK 492920001 A01	26	0.0	NO. OF SAMPLES (26) BELOW MIN. DET. EXCEEDS 50%									0.0				
WYOMING YELLOWSTONE NAT PARK 520960001 A01	26	0.0	NO. OF SAMPLES (26) BELOW MIN. DET. EXCEEDS 50%									0.0				

Table 5-3. CHROMIUM, URBAN QUARTERLY COMPOSITES AND YEARLY AVERAGES, 1969

($\mu g/m^3$)

LOCATION	1ST QTR.	2ND QTR.	3RD QTR.	4TH QTR.	YR. AVG.
ALABAMA					
GADSDEN					
011480001 A01	0.0	0.0	0.0	0.0	*****
HUNTSVILLE					
011860001 A01	0.0	0.0	0.0	0.0	*****
MOBILE					
012980001 A01	0.0	0.0	0.013	0.0	*****
MONTGOMERY					
012460001 A01	0.0	0.0	0.0	0.0	*****
ALASKA					
ANCHORAGE					
020040003 A01	0.0	0.0	0.0	0.0	*****
FAIRBANKS					
020160001 A01	0.0	0.0	0.0	0.0	*****
ARIZONA					
MARICOPA CO					
030440001 A01	0.0	0.0	0.0	0.0	*****
PHOENIX					
030630002 A01	0.0	0.0	0.0	0.0	*****
TUCSON					
030860001 A01	0.0	0.0	0.0	0.0	*****
ARKANSAS					
LITTLE ROCK					
041440001 A01	0.0	0.0	0.0	0.0	*****
TEXARKANA					
042560001 A01	0.0	0.0	0.0	0.0	*****
WEST MEMPHIS					
047760001 A01	0.013	0.0	0.017	0.0	*****
CALIFORNIA					
ANAHEIM					
050230001 A01	0.0	0.0	0.0	0.0	*****
BURBANK					
050900001 A01	0.010	0.010	0.014	0.015	0.012
FRESNO					
052800001 A01	0.0	0.0	0.0	0.0	*****
GLENDALE					
052960001 A01	0.0	0.0	0.0	0.0	*****
LONG BEACH					
054100001 A01	0.0	0.012	0.014	0.0	*****
LOS ANGELES					
054160001 A01	0.015	0.016	0.019	0.019	0.018
OAKLAND					
055900001 A01	0.011	0.014	0.017	0.014	0.014
ONTARIO					
055380001 A01	0.0	0.014	0.012	0.012	0.010
RIVERSIDE					
056400001 A01	0.0	0.012	0.009	0.010	0.009
SACRAMENTO					
056580001 A01	0.0	0.0	0.0	0.0	*****
SAN BERNARDINO					
056680001 A01	0.011	0.020	0.016	0.023	0.017
SAN DIEGO					
056800001 A01	0.022	0.017	0.013	0.013	0.015
SAN FRANCISCO					
056860001 A01	0.0	0.0	0.0	0.0	*****
SAN JOSE					
056940001 A01	0.0	0.0	0.0	0.0	*****
SANTA ANA					
057140001 A01	0.0	0.0	0.0	0.0	*****
TORRANCE					
058260001 A01	0.0	0.010	0.016	0.0	*****
COLORADO					
DENVER					
060580001 A01	0.010	0.017	0.014	0.0	0.011
COLORADO (CONT'D)					
MONTEZUMA CO					
061600002 A01	0.0	0.0	0.0	0.0	*****
CONNECTICUT					
BRIDGEPORT					
070060001 A01	0.0	0.027	0.013	0.008	0.013
HARTFORD					
070420001 A01	0.0	0.0	0.014	0.011	*****
NEW HAVEN					
070700001 A01	0.039	0.0	0.0	0.0	*****
WATERBURY					
071240001 A01	0.014	0.017	0.013	0.019	0.016
DELAWARE					
WILMINGTON					
080260003 A01	0.017	0.013	0.020	0.0	0.013
DIST COLUMBIA					
WASHINGTON					
090020001 A01	0.0	0.016	0.0	0.0	*****
FLORIDA					
JACKSONVILLE					
101960002 A01	0.020	0.0	0.013	0.013	0.012
MIAMI					
102700001 A01	0.0	0.0	0.0	0.0	*****
ST PETERSBURG					
103990002 A01	0.010	0.0	0.015	0.009	0.009
TAMPA					
104360002 A01	0.015	0.014	0.020	0.012	0.015
GEORGIA					
ATLANTA					
110200001 A01	0.0	0.0	0.015	0.0	*****
COLUMBUS					
111280001 A01	0.0	0.0	0.0	0.0	*****
SAVANNAH					
114500001 A01	0.0	0.0	0.0	0.011	*****
HAWAII					
HONOLULU					
120120001 A01	0.0	0.0	0.008	0.0	*****
IDAHO					
BOISE CITY					
130220001 A01	0.0	0.0	0.0	0.0	*****
ILLINOIS					
CHICAGO					
141220001 A01	0.014	0.012	0.016	0.024	0.016
EAST ST LOUIS					
142120001 A01	0.012	0.0	0.0	0.120	*****
JOLIET					
143760001 A01	0.012	0.015	0.017	0.0	0.012
NORTH CHICAGO					
145620002 A01	0.0	0.0	0.013	0.015	*****
PEORIA					
146080001 A01	0.0	0.016	0.014	0.010	0.011
ROCKFORD					
146680001 A01	0.0	0.010	0.019	0.014	0.011
SPRINGFIELD					
147280001 A01	0.0	0.016	0.009	0.0	*****
INDIANA					
EAST CHICAGO					
151180001 A01	0.041	0.053	0.130	0.061	0.064
EVANSVILLE					
151300301 A01	0.089	0.011	0.0	0.009	0.028
FORT WAYNE					
151380001 A01	0.013	0.010	0.022	0.0	0.012
GARY					
151520001 A01	0.018	0.016	0.013	0.016	0.016

Table 5-3 (continued). CHROMIUM, URBAN QUARTERLY COMPOSITES AND YEARLY AVERAGES, 1969

($\mu g/m^3$)

LOCATION	1ST QTR.	2ND QTR.	3RD QTR.	4TH QTR.	YR. AVG.
INDIANA					
HAMMOND					
151780001 A01	0.024	0.021	0.015	0.018	0.019
INDIANAPOLIS					
152040001 A01	0.015	0.013	0.012	0.013	0.013
NEW ALBANY					
152960001 A01	0.018	0.019	0.013	0.012	0.013
SOUTH BEND					
153880001 A01	0.0	0.019	0.0	0.010	*****
TERRE HAUTE					
154080001 A01	0.0	0.0	0.0	0.0	*****
IOWA					
DAVENPORT					
161060001 A01	0.013	0.011	0.032	0.017	0.018
DES MOINES					
161180001 A01	0.0	0.0	0.0	0.0	*****
DUBUQUE					
161260001 A01	0.0	0.0	0.0	0.0	*****
KANSAS					
KANSAS CITY					
171830001 A01	0.011	0.0	0.012	0.016	0.010
TOPEKA					
173560001 A01	0.0	0.0	0.0	0.0	*****
WICHITA					
174740001 A01	0.0	0.0	0.0	0.0	*****
KENTUCKY					
ASHLAND					
180940002 A01	0.019	0.018	0.025	0.017	0.020
COVINGTON					
180830001 A01	0.021	0.018	0.010	0.016	0.017
LOUISVILLE					
182380001 A01	0.019	0.010	0.012	0.016	0.014
LOUISIANA					
BATON ROUGE					
190240001 A01	0.0	0.0	0.0	0.0	*****
NEW ORLEANS					
192020002 A01	0.011	0.017	0.021	0.0	0.013
SHREVEPORT					
192740001 A01	0.0	0.006	0.0	0.0	*****
MARYLAND					
BALTIMORE					
210120001 A01	0.140	0.110	0.092	0.066	0.102
MASSACHUSETTS					
BOSTON					
220240001 A01	0.0	0.0	0.0	0.008	*****
FALL RIVER					
220580002 A01	0.0	0.013	0.0	0.009	*****
SPRINGFIELD					
222160001 A01	0.0	0.0	0.0	0.0	*****
WORCHESTER					
222640001 A01	0.0	0.009	0.0	0.0	*****
MICHIGAN					
DEARBORN					
231140001 A01	0.014	0.014	0.017	0.017	0.015
DETROIT					
231180001 A01	0.019	0.016	0.020	0.019	0.018
FLINT					
231580001 A01	0.012	0.013	0.011	0.0	0.009
GRAND RAPIDS					
231820001 A01	0.015	0.008	0.011	0.0	0.009
LANSING					
232840001 A01	0.013	0.0	0.0	0.0	*****
SAGINAW					
234760001 A01	0.0	0.0	0.0	0.0	*****

LOCATION	1ST QTR.	2ND QTR.	3RD QTR.	4TH QTR.	YR. AVG.
MICHIGAN (CONT)					
TRENTON					
235120001 A01	0.015	0.013	0.0	0.010	0.009
MINNESOTA					
DULUTH					
241040001 A01	0.0	0.0	0.0	0.014	*****
MINNEAPOLIS					
242260001 A01	0.012	0.0	0.0	0.012	*****
ST PAUL					
243300001 A01	0.012	0.012	0.0	0.0	*****
MISSOURI					
KANSAS CITY					
262380001 A01	0.0	0.0	0.010	0.0	*****
ST LOUIS					
264280001 A01	0.018	0.012	0.023	0.018	0.018
MONTANA					
HELENA					
270720001 A01	0.0	0.0	0.0	0.0	*****
NEBRASKA					
OMAHA					
281880001 A01	0.0	0.0	0.0	0.011	*****
NEVADA					
LAS VEGAS					
290320001 A01	0.0	0.0	0.011	0.0	*****
RENO					
290480001 A01	0.0	0.0	0.0	0.0	*****
NEW HAMPSHIRE					
CONCORD					
300120001 A01	0.0	0.0	0.0	0.0	*****
NEW JERSEY					
BURLINGTON CO					
310660002 A01	0.008	0.0	0.0	0.008	*****
ELIZABETH					
311300001 A01	0.009	0.009	0.0	0.011	0.008
GLASSBORO					
311700001 A01	0.011	0.0	0.0	0.0	*****
HAMILTON					
311940001 A01	0.0	0.010	0.018	0.009	0.010
JERSEY CITY					
312320001 A01	0.030	0.025	0.082	0.071	0.052
NEWARK					
313480001 A01	0.015	0.031	0.022	0.029	0.024
PATERSON					
314140001 A01	0.017	0.011	0.0	0.019	0.012
PERTH AMBOY					
314220001 A01	0.011	0.011	0.009	0.010	0.010
TRENTON					
315400001 A01	0.011	0.0	0.0	0.016	*****
NEW MEXICO					
ALBUQUERQUE					
320040001 A01	0.0	0.0	0.0	0.0	*****
NEW YORK					
ALBANY					
330040001 A01	0.009	0.010	0.0	0.011	0.008
BUFFALO					
330660001 A01	0.010	0.031	0.016	0.013	0.017
NEW YORK CITY					
334680001 A01	0.027	0.025	0.014	0.011	0.019
NIAGARA FALLS					
334740001 A01	0.052	0.027	0.0	0.046	0.032
ROCHESTER					
335760001 A01	0.012	0.017	0.0	0.0	*****
SYRACUSE					
336620001 A01	0.043	0.016	0.014	0.0	0.019

Table 5-3 (continued). CHROMIUM, URBAN QUARTERLY COMPOSITES AND YEARLY AVERAGES, 1969

($\mu g/m^3$)

LOCATION	1ST QTR.	2ND QTR.	3RD QTR.	4TH QTR.	YR. AVG.
NEW YORK					
UTICA					
336880001 A01	0.0	0.0	0.0	0.0	*****
NORTH CAROLINA					
CHARLOTTE					
340700001 A01	0.011	0.0	0.0	0.0	*****
DURHAM					
341160001 A01	0.009	0.0	0.0	0.0	*****
GREENSBORO					
341740001 A01	0.012	0.0	0.0	0.0	*****
WINSTON-SALEM					
344460002 A01	0.0	0.0	0.0	0.010	*****
NORTH DAKOTA					
BISMARCK					
350130001 A01	0.0	0.0	0.0	0.0	*****
OHIO					
AKRON					
360060001 A01	0.015	0.017	0.019	0.015	0.016
CANTON					
361030001 A01	0.025	0.020	0.048	0.049	0.035
CINCINNATI					
361220001 A01	0.022	0.026	0.048	0.047	0.036
CLEVELAND					
361300001 A01	0.011	0.015	0.026	0.030	0.020
COLUMBUS					
361460001 A01	0.014	0.015	0.012	0.009	0.013
DAYTON					
361660001 A01	0.013	0.0	0.0	0.015	*****
TOLEDO					
366630001 A01	0.0	0.012	0.0	0.010	*****
YOUNGSTOWN					
367760001 A01	0.026	0.024	0.020	0.054	0.031
OKLAHOMA					
OKLAHOMA CITY					
372230001 A01	0.0	0.0	0.0	0.0	*****
TULSA					
373000001 A01	0.012	0.0	0.0	0.0	*****
OREGON					
MEDFORD					
381160001 A01	0.0	0.0	0.0	0.0	*****
PORTLAND					
381460001 A01	0.010	0.0	0.014	0.0	*****
PENNSYLVANIA					
ALLENTOWN					
390120001 A01	0.0	0.009	0.016	0.0	*****
BETHLEHEM					
390780002 A01	0.012	0.010	0.020	0.023	0.016
ERIE					
393060002 A01	0.0	0.0	0.029	0.0	*****
HARRISBURG					
393840001 A01	0.012	0.012	0.034	0.019	0.019
HAZLETON					
393960001 A01	0.0	0.0	0.0	0.0	*****
JOHNSTOWN					
394660001 A01	0.014	0.0	0.012	0.027	0.014
PHILADELPHIA					
397140001 A01	0.027	0.019	0.036	0.017	0.022
PITTSBURGH					
397260001 A01	0.020	0.073	0.069	0.042	0.050
READING					
397620001 A01	0.049	0.085	0.070	0.052	0.064
SCRANTON					
398040001 A01	0.0	0.0	0.011	0.0	*****
WARMINSTER					
399160001 A01	0.010	0.009	0.0	0.008	0.007
393880001 (CONT)					
WEST CHESTER					
399280001 A01	0.0	0.010	0.0	0.0	*****
WILKES-BARRE					
399430001 A01	0.0	0.0	0.0	0.009	*****
YORK					
399560001 A01	0.022	0.0	0.012	0.009	0.011
PUERTO RICO					
BAYAMON					
400380001 A01	0.009	0.0	0.0	0.017	*****
CATANO					
400560002 A01	0.0	0.021	0.013	0.015	0.013
GUAYANILLA					
401080001 A01	0.0	0.014	0.009	0.0	*****
PONCE					
401920001 A01	0.0	0.0	0.0	0.0	*****
SAN JUAN					
402140001 A01	0.0	0.0	0.013	0.0	*****
RHODE ISLAND					
EAST PROVIDENCE					
410120001 A01	0.0	0.0	0.0	0.0	*****
PROVIDENCE					
410300001 A01	0.0	0.0	0.0	0.0	*****
SOUTH CAROLINA					
COLUMBIA					
420760001 A01	0.0	0.0	0.0	0.0	*****
GREENVILLE					
421180001 A01	0.0	0.0	0.0	0.031	*****
TENNESSEE					
CHATTANOOGA					
440380001 A01	0.023	0.022	0.011	0.013	0.017
KNOXVILLE					
441740001 A01	0.009	0.009	0.014	0.0	0.009
MEMPHIS					
442340001 A01	0.022	0.0	0.0	0.016	*****
NASHVILLE					
442540001 A01	0.013	0.015	0.012	0.016	0.014
TEXAS					
DALLAS					
451310002 A01	0.013	0.014	0.0	0.015	0.011
EL PASO					
451700001 A01	0.0	0.0	0.0	0.0	*****
FORT WORTH					
451880001 A01	0.0	0.0	0.0	0.011	*****
HOUSTON					
452560001 A01	0.011	0.011	0.0	0.0	*****
PASADENA					
454060001 A01	0.010	0.0	0.036	0.0	*****
SAN ANTONIO					
454570001 A01	0.0	0.0	0.0	0.0	*****
UTAH					
OGDEN					
460680001 A01	0.0	0.0	0.0	0.0	*****
SALT LAKE CITY					
460920001 A01	0.0	0.015	0.023	0.013	0.013
VERMONT					
BURLINGTON					
470140001 A01	0.0	0.010	0.0	0.0	*****
VIRGINIA					
DANVILLE					
480920001 A01	0.0	0.012	0.0	0.011	*****
HAMPTON					
481440001 A01	0.0	0.0	0.0	0.0	*****

Table 5-3 (continued). CHROMIUM, URBAN QUARTERLY COMPOSITES AND YEARLY AVERAGES, 1969

($\mu g/m^3$)

LOCATION	1ST QTR.	2ND QTR.	3RD QTR.	4TH QTR.	YR. AVG.
VIRGINIA					
LYNCHBURG					
490840001 A01	0.0	0.0	0.0	0.0	*****
NEWPORT NEWS					
492120001 A01	0.009	0.0	0.0	0.0	*****
NORFOLK					
492140001 A01	0.0	0.0	0.0	0.0	*****
PORTSMOUTH					
492440001 A01	0.0	0.015	0.008	0.012	0.010
RICHMOND					
492660001 A01	0.0	0.0	0.0	0.0	*****
ROANOKE					
492720001 A01	0.013	0.0	0.011	0.012	0.010
WASHINGTON					
SEATTLE					
491840001 A01	0.0	0.0	0.013	0.0	*****
SPOKANE					
492040001 A01	0.0	0.0	0.0	0.0	*****
TACOMA					
492140001 A01	0.010	0.0	0.0	0.0	*****

LOCATION	1ST QTR.	2ND QTR.	3RD QTR.	4TH QTR.	YR. AVG.
WEST VIRGINIA					
CHARLESTON					
500280001 A01	0.048	0.040	0.019	0.036	0.035
WISCONSIN					
EAU CLAIRE					
510840001 A01	0.0	0.0	0.0	0.0	*****
KENOSHA					
511540001 A01	0.009	0.015	0.0	0.019	0.011
MADISON					
511860001 A01	0.0	0.0	0.0	0.0	*****
MILWAUKEE					
512220001 A01	0.010	0.010	0.017	0.026	0.016
RACINE					
512880001 A01	0.0	0.0	0.0	0.0	*****
SUPERIOR					
513480001 A01	0.0	0.0	0.0	0.0	*****
WYOMING					
CASPER					
520120001 A01	0.0	0.0	0.0	0.0	*****
CHEYENNE					
520140001 A01	0.0	0.0	0.0	0.0	*****

Table 5-4. CHROMIUM, NONURBAN QUARTERLY COMPOSITES AND YEARLY AVERAGES, 1969

($\mu g/m^3$)

LOCATION	1ST QTR.	2ND QTR.	3RD QTR.	4TH QTR.	YR. AVG.
ARIZONA					
GRAND CANYON NAT PI					
030370001 A03	0.0	0.0	0.0	0.0	*****
ARKANSAS					
MONTGOMERY CO					
041760001 A03	0.0	0.0	0.0	0.0	*****
CALIFORNIA					
HUMBOLDT CO					
053330001 A03	0.0	0.0	0.0	0.0	*****
FLORIDA					
HARDEE CO					
101680001 A03	0.0	0.0	0.0	0.0	*****
IDAHO					
BUTTE CO					
130360001 A03	0.0	0.0	0.0	0.0	*****
INDIANA					
MONROE CO					
152900001 A03	0.0	0.0	0.0	0.0	*****
PARKE CO					
153260001 A03	0.0	0.0	0.0	0.0	*****
MAINE					
ACADIA NAT PARK					
230010001 A03	0.0	0.015	0.011	0.014	0.010
MARYLAND					
CALVERT CO					
210240001 A03	0.0	0.019	0.0	0.0	*****
MISSOURI					
SHANNON CO					
264480002 A03	0.0	0.0	0.0	0.0	*****
MONTANA					
GLACIER NAT PARK					
270570001 A03	0.0	0.0	0.0	0.0	*****
NEBRASKA					
THOMAS CO					
242480001 A03	0.0	0.0	0.0	0.0	*****
NEVADA					
WHITE PINE CO					
290560001 A03	0.0	0.0	0.0	0.0	*****
NEW HAMPSHIRE					
COOS CO					
300140001 A03	0.0	0.0	0.0	0.0	*****
NEW YORK					
JEFFERSON CO					
333340001 A03	0.0	0.0	0.0	0.0	*****
NORTH CAROLINA					
CAPE HATTERAS NAT					
340590001 A03	0.011	0.0	0.087	0.029	0.032
OKLAHOMA					
CHEROKEE CO					
370480001 A03	0.0	0.0	0.0	0.0	*****
OREGON					
CURRY CO					
380440001 A03	0.0	0.0	0.009	0.018	*****
PENNSYLVANIA					
CLARION CO					
391760001 A03	0.011	0.0	0.0	0.016	*****
RHODE ISLAND					
WASHINGTON CO					
410380002 A03	0.0	0.0	0.0	0.0	*****
SOUTH CAROLINA					
RICHLAND CO					
421900001 A03	0.0	0.0	0.0	0.0	*****
SOUTH DAKOTA					
BLACK HILLS NAT FO					
430110001 A03	0.0	0.0	0.0	0.0	*****
TENNESSEE					
CUMBERLAND CO					
440680001 A03	0.0	0.0	0.0	0.0	*****
TEXAS					
MATAGORDA CO					
483530001 A03	0.0	0.0	0.0	0.0	*****
VERMONT					
ORANGE CO					
470360001 A03	0.0	0.0	0.0	0.0	*****
VIRGINIA					
SHENANDOAH NAT PAR					
482890001 A03	0.0	0.0	0.0	0.0	*****
WYTHE CO					
483440001 A03	0.0	0.0	0.0	0.0	*****
WISCONSIN					
DOOR CO					
513740001 A03	0.0	0.0	0.0	0.0	*****
WYOMING					
YELLOWSTONE NAT PA					
520860001 A03	0.0	0.0	0.0	0.0	*****

SECTION 6. URBAN AND NONURBAN METALS IN SUSPENDED PARTICULATES: COBALT

Table 6-1. COBALT, URBAN FREQUENCY DISTRIBUTIONS, 1968

($\mu g/m^3$)

LOCATION	NO. SAMP.	MIN.	FREQUENCY DISTRIBUTION, %									MAX.	ARITHMETIC MEAN	ARITHMETIC STD. DEV.	GEOMETRIC MEAN	GEOMETRIC STD. DEV.
			10	20	30	40	50	60	70	80	90					
ALABAMA																
GADSDEN																
011440001 A01	25	10.0	NO. OF SAMPLES (25) BELOW MIN. DET. EXCEEDS 50%									10.0				
HUNTSVILLE																
011440301 A01	26	10.0	NO. OF SAMPLES (26) BELOW MIN. DET. EXCEEDS 50%									10.0				
MOBILE																
012380001 A01	25	10.0	NO. OF SAMPLES (25) BELOW MIN. DET. EXCEEDS 50%									10.0				
MONTGOMERY																
012440301 A01	26	10.0	NO. OF SAMPLES (26) BELOW MIN. DET. EXCEEDS 50%									10.0				
ALASKA																
ANCHORAGE																
070040001 A01	26	10.0	NO. OF SAMPLES (26) BELOW MIN. DET. EXCEEDS 50%									10.0				
FAIRBANKS																
070140301 A01	23	10.0	NO. OF SAMPLES (23) BELOW MIN. DET. EXCEEDS 50%									10.0				
ARIZONA																
MARICOPA CO																
030440001 A01	25	10.0	NO. OF SAMPLES (25) BELOW MIN. DET. EXCEEDS 50%									10.0				
PHOENIX																
030440301 A01	26	10.0	NO. OF SAMPLES (26) BELOW MIN. DET. EXCEEDS 50%									10.0				
TUCSON																
030440301 A01	25	10.0	NO. OF SAMPLES (25) BELOW MIN. DET. EXCEEDS 50%									10.0				
ARKANSAS																
LITTLE ROCK																
041440301 A01	25	10.0	NO. OF SAMPLES (25) BELOW MIN. DET. EXCEEDS 50%									10.0				
TEXARKANA																
047560001 A01	25	10.0	NO. OF SAMPLES (25) BELOW MIN. DET. EXCEEDS 50%									10.0				
WEST MEMPHIS																
047640301 A01	24	10.0	NO. OF SAMPLES (24) BELOW MIN. DET. EXCEEDS 50%									10.009				
CALIFORNIA																
BURBANK																
052920301 A01	26	10.0	NO. OF SAMPLES (26) BELOW MIN. DET. EXCEEDS 50%									10.007				
GLENDALE																
052940301 A01	25	10.0	NO. OF SAMPLES (25) BELOW MIN. DET. EXCEEDS 50%									10.007				
LONG BEACH																
056180301 A01	26	10.0	NO. OF SAMPLES (26) BELOW MIN. DET. EXCEEDS 50%									10.006				
LOS ANGELES																
056183001 A01	26	10.0	NO. OF SAMPLES (26) BELOW MIN. DET. EXCEEDS 50%									10.0				
OAKLAND																
056330301 A01	25	10.0	NO. OF SAMPLES (25) BELOW MIN. DET. EXCEEDS 50%									10.005				
ONTARIO																
056390001 A01	26	10.0	NO. OF SAMPLES (26) BELOW MIN. DET. EXCEEDS 50%									10.0				
PASADENA																
056760001 A01	25	10.0	NO. OF SAMPLES (25) BELOW MIN. DET. EXCEEDS 50%									10.0				
RIVERSIDE																
056900301 A01	26	10.0	NO. OF SAMPLES (26) BELOW MIN. DET. EXCEEDS 50%									10.0				
SACRAMENTO																
056980031 A01	26	10.0	NO. OF SAMPLES (26) BELOW MIN. DET. EXCEEDS 50%									10.0				
SAN BERNARDINO																
056A90001 A01	26	10.0	NO. OF SAMPLES (26) BELOW MIN. DET. EXCEEDS 50%									10.0				
SAN DIEGO																
056B00031 A01	26	10.0	NO. OF SAMPLES (26) BELOW MIN. DET. EXCEEDS 50%									10.0				
SAN FRANCISCO																
056H60061 A01	26	10.0	NO. OF SAMPLES (26) BELOW MIN. DET. EXCEEDS 50%									10.0				
COLORADO																
DENVER																
060580301 A01	26	10.0	NO. OF SAMPLES (26) BELOW MIN. DET. EXCEEDS 50%									10.0				
CONNECTICUT																
HARTFORD																
070420301 A01	26	10.0	NO. OF SAMPLES (26) BELOW MIN. DET. EXCEEDS 50%									10.0				
NEW HAVEN																
070730301 A01	26	10.0	NO. OF SAMPLES (26) BELOW MIN. DET. EXCEEDS 50%									10.011				
DELAWARE																
NEWARK																
080140301 A01	26	10.0	NO. OF SAMPLES (26) BELOW MIN. DET. EXCEEDS 50%									10.0				
WILMINGTON																
080260301 A01	23	10.0	NO. OF SAMPLES (23) BELOW MIN. DET. EXCEEDS 50%									10.015				

Table 6-1 (continued). COBALT, URBAN FREQUENCY DISTRIBUTIONS, 1968

($\mu g/m^3$)

LOCATION	NO. SAMP.	MIN.	FREQUENCY DISTRIBUTION, %									MAX.	ARITHMETIC		GEOMETRIC	
			10	20	30	40	50	60	70	80	90		MEAN	STD. DEV.	MEAN	STD. DEV.
DIST OF COLUMBIA																
WASHINGTON																
090370001 A01	26	10.0	NO. OF SAMPLES EQUAL TO OR BELOW MIN. DET. EXCEEDS 50%									10.0				
FLORIDA																
JACKSONVILLE																
120660002 A01	25	10.0	NO. OF SAMPLES EQUAL TO OR BELOW MIN. DET. EXCEEDS 50%									10.0				
FLORIDA																
TAMPA																
120570001 A01	23	10.0	NO. OF SAMPLES EQUAL TO OR BELOW MIN. DET. EXCEEDS 50%									10.305				
GEORGIA																
ATLANTA																
130210001 A01	26	10.0	NO. OF SAMPLES EQUAL TO OR BELOW MIN. DET. EXCEEDS 50%									10.009				
HAWAII																
HONOLULU																
150030001 A01	26	10.0	NO. OF SAMPLES EQUAL TO OR BELOW MIN. DET. EXCEEDS 50%									10.017				
IDAHO																
BOISE CITY																
160010001 A01	26	10.0	NO. OF SAMPLES EQUAL TO OR BELOW MIN. DET. EXCEEDS 50%									10.004				
ILLINOIS																
CHICAGO																
140310002 A01	26	10.0	10.0	10.0	10.0	10.004	10.004	10.004	10.004	10.004	10.009	10.011				
EAST ST LOUIS																
160120001 A01	25	10.0	NO. OF SAMPLES EQUAL TO OR BELOW MIN. DET. EXCEEDS 50%									10.008				
AKRON																
360170002 A01	21	10.0	NO. OF SAMPLES EQUAL TO OR BELOW MIN. DET. EXCEEDS 50%									10.0				
CINCINNATI																
360610001 A01	25	10.0	NO. OF SAMPLES EQUAL TO OR BELOW MIN. DET. EXCEEDS 50%									10.0				
CLEVELAND																
360850001 A01	24	10.0	NO. OF SAMPLES EQUAL TO OR BELOW MIN. DET. EXCEEDS 50%									10.0				
EAST CHICAGO																
180890004 A01	26	10.0	NO. OF SAMPLES EQUAL TO OR BELOW MIN. DET. EXCEEDS 50%									10.008				
GARY																
180890003 A01	26	10.0	NO. OF SAMPLES EQUAL TO OR BELOW MIN. DET. EXCEEDS 50%									10.008				
INDIANAPOLIS																
180970078 A01	25	10.0	NO. OF SAMPLES EQUAL TO OR BELOW MIN. DET. EXCEEDS 50%									10.009				
SOUTH BEND																
181410003 A01	24	10.0	NO. OF SAMPLES EQUAL TO OR BELOW MIN. DET. EXCEEDS 50%									10.006				
IOWA																
DAVENPORT-BETTEN																
191630015 A01	26	10.0	NO. OF SAMPLES EQUAL TO OR BELOW MIN. DET. EXCEEDS 50%									10.0				
DES MOINES																
191530027 A01	26	10.0	NO. OF SAMPLES EQUAL TO OR BELOW MIN. DET. EXCEEDS 50%									10.0				
SIOUX CITY																
193870003 A01	24	10.0	NO. OF SAMPLES EQUAL TO OR BELOW MIN. DET. EXCEEDS 50%									10.0				
KANSAS																
KANSAS CITY																
171190024 A01	26	10.0	NO. OF SAMPLES EQUAL TO OR BELOW MIN. DET. EXCEEDS 50%									10.035				
TOPEKA																
172090003 A01	24	10.0	NO. OF SAMPLES EQUAL TO OR BELOW MIN. DET. EXCEEDS 50%									10.004				
WICHITA																
172140104 A01	26	10.0	NO. OF SAMPLES EQUAL TO OR BELOW MIN. DET. EXCEEDS 50%									10.035				
KENTUCKY																
ASHLAND																
180190002 A01	25	10.0	NO. OF SAMPLES EQUAL TO OR BELOW MIN. DET. EXCEEDS 50%									10.010				
COVINGTON																
180370001 A01	25	10.0	NO. OF SAMPLES EQUAL TO OR BELOW MIN. DET. EXCEEDS 50%									10.006				
LEXINGTON																
180390001 A01	24	10.0	NO. OF SAMPLES EQUAL TO OR BELOW MIN. DET. EXCEEDS 50%									10.005				
LOUISVILLE																
180770001 A01	25	10.0	NO. OF SAMPLES EQUAL TO OR BELOW MIN. DET. EXCEEDS 50%									10.007				
LOUISIANA																
NEW ORLEANS																
190970002 A01	25	10.0	NO. OF SAMPLES EQUAL TO OR BELOW MIN. DET. EXCEEDS 50%									10.013				
MAINE																
PORTLAND																
200060002 A01	21	10.0	NO. OF SAMPLES EQUAL TO OR BELOW MIN. DET. EXCEEDS 50%									10.014				
MARYLAND																
BALTIMORE																
210130001 A01	25	10.0	NO. OF SAMPLES EQUAL TO OR BELOW MIN. DET. EXCEEDS 50%									10.007				

Table 6-1 (continued). COBALT, URBAN FREQUENCY DISTRIBUTIONS, 1968

($\mu g/m^3$)

LOCATION	NO. SAMP.	MIN.	FREQUENCY DISTRIBUTION, %									MAX.	ARITHMETIC MEAN	ARITHMETIC STD. DEV.	GEOMETRIC MEAN	GEOMETRIC STD. DEV.
			10	20	30	40	50	60	70	80	90					
MASSACHUSETTS																
BOSTON																
250240001 A01	25	10.0	NO. OF SAMPLES (25) BELOW MIN. DET. EXCEEDS 50%									10.0				
WORCHESTER																
252640002 A01	24	10.0	NO. OF SAMPLES (23) BELOW MIN. DET. EXCEEDS 50%									10.007				
MICHIGAN																
DETROIT																
261160001 A01	24	10.0	NO. OF SAMPLES (16) BELOW MIN. DET. EXCEEDS 50%									10.012				
FLINT																
261490001 A01	24	10.0	NO. OF SAMPLES (23) BELOW MIN. DET. EXCEEDS 50%									10.011				
GRAND RAPIDS																
261970001 A01	24	10.0	NO. OF SAMPLES (24) BELOW MIN. DET. EXCEEDS 50%									10.0				
TRENTON																
263740001 A01	25	10.0	NO. OF SAMPLES (24) BELOW MIN. DET. EXCEEDS 50%									10.0				
MINNESOTA																
DULUTH																
274160001 A01	23	10.0	NO. OF SAMPLES (23) BELOW MIN. DET. EXCEEDS 50%									10.0				
MINNEAPOLIS																
274360001 A01	24	10.0	NO. OF SAMPLES (23) BELOW MIN. DET. EXCEEDS 50%									10.005				
ROCHESTER																
274810001 A01	24	10.0	NO. OF SAMPLES (24) BELOW MIN. DET. EXCEEDS 50%									10.0				
ST PAUL																
274330001 A01	24	10.0	NO. OF SAMPLES (24) BELOW MIN. DET. EXCEEDS 50%									10.0				
MISSISSIPPI																
JACKSON																
281240001 A01	24	10.0	NO. OF SAMPLES (24) BELOW MIN. DET. EXCEEDS 50%									10.0				
MISSOURI																
KANSAS CITY																
297340001 A01	24	10.0	NO. OF SAMPLES (24) BELOW MIN. DET. EXCEEDS 50%									10.0				
MONTANA																
HELENA																
302720001 A01	24	10.0	NO. OF SAMPLES (24) BELOW MIN. DET. EXCEEDS 50%									10.0				
NEBRASKA																
OMAHA																
281480001 A01	25	10.0	NO. OF SAMPLES (24) BELOW MIN. DET. EXCEEDS 50%									10.011				
NEVADA																
LAS VEGAS																
290870001 A01	24	10.0	NO. OF SAMPLES (24) BELOW MIN. DET. EXCEEDS 50%									10.0				
RENO																
290490001 A01	25	10.0	NO. OF SAMPLES (18) BELOW MIN. DET. EXCEEDS 50%									10.013				
NEW HAMPSHIRE																
CONCORD																
300170001 A01	25	10.0	NO. OF SAMPLES (23) BELOW MIN. DET. EXCEEDS 50%									10.007				
NEW JERSEY																
BAYONNE																
310140001 A01	21	10.0	10.0	10.0	10.0	10.0	10.004	10.004	10.005	10.005	10.006	10.017				
BURLINGTON CO																
310660002 A01	25	10.0	NO. OF SAMPLES (23) BELOW MIN. DET. EXCEEDS 50%									10.007				
CAMDEN																
310720001 A01	24	10.0	NO. OF SAMPLES (15) BELOW MIN. DET. EXCEEDS 50%									10.022				
GLASSBORO																
311900001 A01	25	10.0	NO. OF SAMPLES (24) BELOW MIN. DET. EXCEEDS 50%									10.004				
HAMILTON																
311940001 A01	22	10.0	NO. OF SAMPLES (19) BELOW MIN. DET. EXCEEDS 50%									10.004				
JERSEY CITY																
312720001 A01	25	10.0	NO. OF SAMPLES (22) BELOW MIN. DET. EXCEEDS 50%									10.008				
NEWARK																
313480001 A01	24	10.0	NO. OF SAMPLES (20) BELOW MIN. DET. EXCEEDS 50%									10.010				
PATERSON																
314140001 A01	25	10.0	NO. OF SAMPLES (25) BELOW MIN. DET. EXCEEDS 50%									10.0				
PERTH AMBOY																
314720001 A01	24	10.0	NO. OF SAMPLES (24) BELOW MIN. DET. EXCEEDS 50%									10.0				
TRENTON																
315400001 A01	24	10.0	NO. OF SAMPLES (24) BELOW MIN. DET. EXCEEDS 50%									10.0				
NEW MEXICO																
ALBUQUERQUE																
320340001 A01	24	10.0	NO. OF SAMPLES (24) BELOW MIN. DET. EXCEEDS 50%									10.0				

Table 6-1 (continued). COBALT, URBAN FREQUENCY DISTRIBUTIONS, 1968

($\mu g/m^3$)

LOCATION	NO. SAMP.	MIN.	FREQUENCY DISTRIBUTION, %								MAX.	ARITHMETIC MEAN	ARITHMETIC STD. DEV.	GEOMETRIC MEAN	GEOMETRIC STD. DEV.
			10	30	50	70	90								
SOUTH CAROLINA															
CHARLESTON															
4502C0001 AC1	25	10.0	NO. OF SAMPLES (		7%) BELOW MIN. DET. EXCEEDS 50%						10.009				
SIOUX FALLS															
4611A0001 S01	23	10.0	NO. OF SAMPLES (		7%) BELOW MIN. DET. EXCEEDS 50%						10.006				
SOUTH DAKOTA															
RAPID CITY															
4602A0001 S01	25	10.0	NO. OF SAMPLES (		7%) BELOW MIN. DET. EXCEEDS 50%						10.0				
TEXAS															
AMARILLO															
4610A0001 A01	25	10.0	NO. OF SAMPLES (		2%) BELOW MIN. DET. EXCEEDS 50%						10.0				
CORPUS CHRISTI															
4612C0001 S01	26	10.0	NO. OF SAMPLES (		7%) BELOW MIN. DET. EXCEEDS 50%						10.007				
DALLAS															
4613A0001 S01	26	10.0	NO. OF SAMPLES (		2%) BELOW MIN. DET. EXCEEDS 50%						10.005				
EL PASO															
4614A0001 A01	24	10.0	NO. OF SAMPLES (		7%) BELOW MIN. DET. EXCEEDS 50%						10.0				
HOUSTON															
4614A0001 S01	26	10.0	NO. OF SAMPLES (		3%) BELOW MIN. DET. EXCEEDS 50%						10.009				
TOLEDO															
4644A0001 A01	23	10.0	NO. OF SAMPLES (		2%) BELOW MIN. DET. EXCEEDS 50%						10.005				
WASHINGTON															
4677A0001 A01	25	10.0	NO. OF SAMPLES (		2%) BELOW MIN. DET. EXCEEDS 50%						10.006				
OKLAHOMA															
OKLAHOMA CITY															
4722A0001 A01	22	10.0	NO. OF SAMPLES (		2%) BELOW MIN. DET. EXCEEDS 50%						10.0				
TULSA															
4724A0001 A01	24	10.0	NO. OF SAMPLES (		2%) BELOW MIN. DET. EXCEEDS 50%						10.0				
OREGON															
MEDFORD															
4811A0001 A01	25	10.0	NO. OF SAMPLES (		5%) BELOW MIN. DET. EXCEEDS 50%						10.0				
PORTLAND															
4814A0001 S01	25	10.0	NO. OF SAMPLES (		2%) BELOW MIN. DET. EXCEEDS 50%						10.014				
PENNSYLVANIA															
ALLENTOWN															
4901A0001 A01	24	10.0	NO. OF SAMPLES (		2%) BELOW MIN. DET. EXCEEDS 50%						10.0				
ALTOONA															
4901A0001 A01	23	10.0	NO. OF SAMPLES (		2%) BELOW MIN. DET. EXCEEDS 50%						10.0				
BETHLEHEM															
4902A0001 A01	24	10.0	NO. OF SAMPLES (		2%) BELOW MIN. DET. EXCEEDS 50%						10.006				
HARRISBURG															
4904A0001 A01	26	10.0	NO. OF SAMPLES (		2%) BELOW MIN. DET. EXCEEDS 50%						10.005				
HAZLETON															
4905A0001 A01	24	10.0	NO. OF SAMPLES (		7%) BELOW MIN. DET. EXCEEDS 50%						10.0				
JOHNSTOWN															
4906A0001 A01	23	10.0	NO. OF SAMPLES (		1%) BELOW MIN. DET. EXCEEDS 50%						10.017				
PHILADELPHIA															
4911A0001 A01	25	10.0	NO. OF SAMPLES (		2%) BELOW MIN. DET. EXCEEDS 50%						10.018				
PITTSBURGH															
4912A0001 S01	26	10.0	NO. OF SAMPLES (		1%) BELOW MIN. DET. EXCEEDS 50%						10.037				
READING															
4914A0001 S01	25	10.0	NO. OF SAMPLES (		2%) BELOW MIN. DET. EXCEEDS 50%						10.110				
SCRANTON															
4916A0001 A01	25	10.0	NO. OF SAMPLES (		2%) BELOW MIN. DET. EXCEEDS 50%						10.011				
WASHINGTON															
4918A0001 A01	25	10.0	NO. OF SAMPLES (		2%) BELOW MIN. DET. EXCEEDS 50%						10.005				
WEST CHESTER															
4919A0001 S01	24	10.0	NO. OF SAMPLES (		7%) BELOW MIN. DET. EXCEEDS 50%						10.0				
WILKES-BARRE															
4920A0001 A01	24	10.0	NO. OF SAMPLES (		3%) BELOW MIN. DET. EXCEEDS 50%						10.006				
YORK															
4956A0001 S01	25	10.0	NO. OF SAMPLES (		5%) BELOW MIN. DET. EXCEEDS 50%						10.0				
PUERTO RICO															
RAYAMON															
4009A0001 A01	25	10.0	NO. OF SAMPLES (		5%) BELOW MIN. DET. EXCEEDS 50%						10.0				
CATANO															
4005A0001 A01	25	10.0	NO. OF SAMPLES (		5%) BELOW MIN. DET. EXCEEDS 50%						10.0				

Table 6-1 (continued). COBALT, URBAN FREQUENCY DISTRIBUTIONS, 1968

($\mu g/m^3$)

LOCATION	NO. SAMP.	MIN.	FREQUENCY DISTRIBUTION, %									MAX.	ARITHMETIC		GEOMETRIC	
			10	20	30	40	50	60	70	80	90		MEAN	STD. DEV.	MEAN	STD. DEV.
PUERTO RICO																
GUAYANILLA																
48E1803I1 A01	25	10.0	NO. OF SAMPLES (25) BELOW MIN. DET. EXCEEDS 50%									10.3				
PONCE																
48E1700I1 A01	25	10.0	NO. OF SAMPLES (25) BELOW MIN. DET. EXCEEDS 50%									10.0				
RHODE ISLAND																
EAST PROVIDENCE																
44E1200I1 A01	26	10.0	NO. OF SAMPLES (26) BELOW MIN. DET. EXCEEDS 50%									10.0				
PROVIDENCE																
41E1900I1 A01	25	10.0	NO. OF SAMPLES (25) BELOW MIN. DET. EXCEEDS 50%									10.0				
SOUTH CAROLINA																
COLUMBIA																
45E1700I1 A01	24	10.0	NO. OF SAMPLES (24) BELOW MIN. DET. EXCEEDS 50%									10.0				
GREENVILLE																
42E1900I1 A01	26	10.0	NO. OF SAMPLES (26) BELOW MIN. DET. EXCEEDS 50%									10.0				
SOUTH DAKOTA																
SIOUX FALLS																
43E1900I1 A01	27	10.0	NO. OF SAMPLES (27) BELOW MIN. DET. EXCEEDS 50%									10.0				
TENNESSEE																
CHATTANOOGA																
46E1400I1 A01	26	10.0	NO. OF SAMPLES (26) BELOW MIN. DET. EXCEEDS 50%									10.0				
KNOXVILLE																
46E1700I1 A01	26	10.0	NO. OF SAMPLES (26) BELOW MIN. DET. EXCEEDS 50%									10.0				
MEMPHIS																
46E1400I1 A01	26	10.0	NO. OF SAMPLES (26) BELOW MIN. DET. EXCEEDS 50%									10.0				
NASHVILLE																
46E1400I1 A01	26	10.0	NO. OF SAMPLES (26) BELOW MIN. DET. EXCEEDS 50%									10.0				
TEXAS																
DALLAS																
48E1900I1 A01	26	10.0	NO. OF SAMPLES (26) BELOW MIN. DET. EXCEEDS 50%									10.0				
HOUSTON																
48E1600I1 A01	26	10.0	NO. OF SAMPLES (26) BELOW MIN. DET. EXCEEDS 50%									10.0				
PASADENA																
48E1600I1 A01	26	10.0	NO. OF SAMPLES (26) BELOW MIN. DET. EXCEEDS 50%									10.0				
SAN ANTONIO																
48E1700I1 A01	26	10.0	NO. OF SAMPLES (26) BELOW MIN. DET. EXCEEDS 50%									10.0				
UTAH																
OGDEN																
48E1800I1 A01	26	10.0	NO. OF SAMPLES (26) BELOW MIN. DET. EXCEEDS 50%									10.0				
SALT LAKE CITY																
48E1700I1 A01	26	10.0	NO. OF SAMPLES (26) BELOW MIN. DET. EXCEEDS 50%									10.0				
VERMONT																
BURLINGTON																
47E1400I1 A01	26	10.0	NO. OF SAMPLES (26) BELOW MIN. DET. EXCEEDS 50%									10.0				
VIRGINIA																
DANVILLE																
48E1700I1 A01	26	10.0	NO. OF SAMPLES (26) BELOW MIN. DET. EXCEEDS 50%									10.0				
HAMPTON																
48E1400I1 A01	26	10.0	NO. OF SAMPLES (26) BELOW MIN. DET. EXCEEDS 50%									10.0				
LYNCHBURG																
48E1400I1 A01	26	10.0	NO. OF SAMPLES (26) BELOW MIN. DET. EXCEEDS 50%									10.0				
NORFOLK																
48E1400I1 A01	26	10.0	NO. OF SAMPLES (26) BELOW MIN. DET. EXCEEDS 50%									10.0				
PORTSMOUTH																
48E1400I1 A01	26	10.0	NO. OF SAMPLES (26) BELOW MIN. DET. EXCEEDS 50%									10.0				
RICHMOND																
48E1400I1 A01	26	10.0	NO. OF SAMPLES (26) BELOW MIN. DET. EXCEEDS 50%									10.0				
ROANOKE																
48E1700I1 A01	25	10.0	NO. OF SAMPLES (25) BELOW MIN. DET. EXCEEDS 50%									10.0				
WASHINGTON																
SEATTLE																
49E1400I1 A01	26	10.0	NO. OF SAMPLES (26) BELOW MIN. DET. EXCEEDS 50%									10.0				
WEST VIRGINIA																
CHARLESTON																
50E2800I1 A01	24	10.0	NO. OF SAMPLES (24) BELOW MIN. DET. EXCEEDS 50%									10.044				
WISCONSIN																
EAU CLAIRE																
51E1400I1 A01	24	10.0	NO. OF SAMPLES (24) BELOW MIN. DET. EXCEEDS 50%									10.0				

Table 6-1 (continued). COBALT, URBAN FREQUENCY DISTRIBUTIONS, 1968

($\mu g/m^3$)

LOCATION	NO. SAMP.	MIN.	FREQUENCY DISTRIBUTION, % 10	20	30	40	50	60	70	80	90	MAX.	ARITHMETIC MEAN	ARITHMETIC STD. DEV.	GEOMETRIC MEAN	GEOMETRIC STD. DEV.
WISCONSIN																
KENOSHA																
511540001 A01	25	0.0	NO. OF SAMPLES (25) BELOW MIN. DET. EXCEEDS 50%									0.0				
MADISON																
511860001 A01	25	0.0	NO. OF SAMPLES (25) BELOW MIN. DET. EXCEEDS 50%									0.0				
MILWAUKEE																
512700001 A01	25	0.0	NO. OF SAMPLES (25) BELOW MIN. DET. EXCEEDS 50%									0.0				
SUPERIOR																
513480001 A01	23	0.0	NO. OF SAMPLES (23) BELOW MIN. DET. EXCEEDS 50%									0.0				
WYOMING																
CASPER																
520120001 A01	26	0.0	NO. OF SAMPLES (26) BELOW MIN. DET. EXCEEDS 50%									0.0				
CHEYENNE																
520140001 A01	26	0.0	NO. OF SAMPLES (26) BELOW MIN. DET. EXCEEDS 50%									0.0				

Table 6-2. COBALT, NONURBAN FREQUENCY DISTRIBUTIONS, 1968

($\mu g/m^3$)

LOCATION	NO. SAMP.	MIN.	FREQUENCY DISTRIBUTION, %									MAX.	ARITHMETIC MEAN	ARITHMETIC STD. DEV.	GEOMETRIC MEAN	GEOMETRIC STD. DEV.
			10	20	30	40	50	60	70	80	90					
ARIZONA																
[illegible]	25	10.0	NO. OF SAMPLES (25) BELOW MIN. DET. EXCEEDS 50%									10.0				
ARKANSAS																
[illegible]	25	10.0	NO. OF SAMPLES (25) BELOW MIN. DET. EXCEEDS 50%									10.0				
COLORADO																
[illegible]	26	10.0	NO. OF SAMPLES (25) BELOW MIN. DET. EXCEEDS 50%									10.004				
[illegible]	21	10.0	NO. OF SAMPLES (21) BELOW MIN. DET. EXCEEDS 50%									10.0				
FLORIDA																
[illegible]	24	10.0	NO. OF SAMPLES (24) BELOW MIN. DET. EXCEEDS 50%									10.0				
IDAHO																
[illegible]	24	10.0	NO. OF SAMPLES (24) BELOW MIN. DET. EXCEEDS 50%									10.0				
INDIANA																
[illegible]	-	10.0	NO. OF SAMPLES (24) BELOW MIN. DET. EXCEEDS 50%									10.0				
[illegible]	24	10.0	NO. OF SAMPLES (24) BELOW MIN. DET. EXCEEDS 50%									10.002				
MAINE																
[illegible]	24	10.0	NO. OF SAMPLES (23) BELOW MIN. DET. EXCEEDS 50%									10.002				
MARYLAND																
[illegible]	23	10.0	NO. OF SAMPLES (14) BELOW MIN. DET. EXCEEDS 50%									10.002				
MISSISSIPPI																
[illegible]	24	10.0	NO. OF SAMPLES (24) BELOW MIN. DET. EXCEEDS 50%									10.0				
MISSOURI																
[illegible]	25	10.0	NO. OF SAMPLES (25) BELOW MIN. DET. EXCEEDS 50%									10.0				
MONTANA																
[illegible]	21	10.0	NO. OF SAMPLES (13) BELOW MIN. DET. EXCEEDS 50%									10.003				
NEBRASKA																
[illegible]	24	10.0	NO. OF SAMPLES (20) BELOW MIN. DET. EXCEEDS 50%									10.002				
NEVADA																
[illegible]	26	10.0	NO. OF SAMPLES (15) BELOW MIN. DET. EXCEEDS 50%									10.003				
NEW HAMPSHIRE																
[illegible]	23	10.0	NO. OF SAMPLES (23) BELOW MIN. DET. EXCEEDS 50%									10.0				
NEW YORK																
[illegible]	26	10.0	NO. OF SAMPLES (26) BELOW MIN. DET. EXCEEDS 50%									10.0				
NORTH CAROLINA																
[illegible]	25	10.0	NO. OF SAMPLES (25) BELOW MIN. DET. EXCEEDS 50%									10.0				
OKLAHOMA																
[illegible]	25	10.0	NO. OF SAMPLES (25) BELOW MIN. DET. EXCEEDS 50%									10.0				
OREGON																
[illegible]	26	10.0	NO. OF SAMPLES (26) BELOW MIN. DET. EXCEEDS 50%									10.0				
PENNSYLVANIA																
[illegible]	25	10.0	NO. OF SAMPLES (25) BELOW MIN. DET. EXCEEDS 50%									10.0				
RHODE ISLAND																
[illegible]	24	10.0	NO. OF SAMPLES (24) BELOW MIN. DET. EXCEEDS 50%									10.002				
SOUTH CAROLINA																
[illegible]	23	10.0	NO. OF SAMPLES (23) BELOW MIN. DET. EXCEEDS 50%									10.0				
SOUTH DAKOTA																
[illegible]	24	10.0	NO. OF SAMPLES (24) BELOW MIN. DET. EXCEEDS 50%									10.002				

Table 6-2 (continued). COBALT, NONURBAN FREQUENCY DISTRIBUTIONS, 1968

($\mu g/m^3$)

LOCATION	NO. SAMP.	MIN.	FREQUENCY DISTRIBUTION, %									MAX.	ARITHMETIC MEAN	ARITHMETIC ST. DEV.	GEOMETRIC MEAN	GEOMETRIC ST. DEV.
			10	20	30	40	50	60	70	80	90					
TEXAS																
MATAGORDA CO.																
[illegible]	[illegible]	[illegible]	NO. OF SAMPLES [illegible]									[illegible]				
VERMONT																
ORANGE CO.																
[illegible]	[illegible]	[illegible]	NO. OF SAMPLES [illegible]									[illegible]				
VIRGINIA																
SHENANDOAH NAT PK																
[illegible]	[illegible]	[illegible]	NO. OF SAMPLES [illegible]									[illegible]				
WYOMING																
YELLOWSTONE NAT PK																
[illegible]	[illegible]	[illegible]	NO. OF SAMPLES [illegible]									[illegible]				

Table 6-3. COBALT, URBAN QUARTERLY COMPOSITES AND YEARLY AVERAGES, 1969

($\mu g/m^3$)

LOCATION	1ST QTR.	2ND QTR.	3RD QTR.	4TH QTR.	YR. AVG.
ALABAMA					
GADSDEN					
011490001 A01	0.0	0.0	0.0	0.0	*****
HUNTSVILLE					
011860001 A01	0.006	0.006	0.006	0.006	0.006
MOBILE					
012380001 A01	0.008	0.0	0.0	0.007	*****
MONTGOMERY					
012460001 A01	0.0	0.0	0.0	0.0	*****
ALASKA					
ANCHORAGE					
020040001 A01	0.0	0.007	0.0	0.0	*****
FAIRBANKS					
020140001 A01	0.006	0.008	0.007	0.0	0.005
ARIZONA					
MARICOPA CO					
030440001 A01	0.0	0.0	0.0	0.0	*****
PHOENIX					
030480001 A01	0.0	0.004	0.0	0.0	*****
TUCSON					
030840001 A01	0.0	0.0	0.0	0.0	*****
ARKANSAS					
LITTLE ROCK					
041440001 A01	0.0	0.0	0.0	0.0	*****
TEXARKANA					
042540001 A01	0.0	0.0	0.0	0.0	*****
WEST MEMPHIS					
042740001 A01	0.006	0.0	0.0	0.0	*****
CALIFORNIA					
ANAHEIM					
050210001 A01	0.0	0.0	0.0	0.0	*****
BURBANK					
050900001 A01	0.0	0.0	0.0	0.0	*****
FRESNO					
051800001 A01	0.0	0.0	0.0	0.0	*****
GLENDALE					
052040001 A01	0.0	0.007	0.0	0.0	*****
LONG BEACH					
054100001 A01	0.0	0.0	0.0	0.0	*****
LOS ANGELES					
054140001 A01	0.0	0.0	0.0	0.0	*****
OAKLAND					
055300001 A01	0.0	0.0	0.0	0.0	*****
ONTARIO					
055360001 A01	0.0	0.006	0.007	0.006	0.005
RIVERSIDE					
056400001 A01	0.008	0.009	0.007	0.007	0.007
SACRAMENTO					
056540001 A01	0.007	0.007	0.007	0.007	0.007
SAN BERNARDINO					
056630001 A01	0.007	0.007	0.007	0.006	0.007
SAN DIEGO					
056820001 A01	0.008	0.0	0.007	0.007	0.006
SAN FRANCISCO					
056860001 A01	0.0	0.008	0.007	0.010	0.007
SAN JOSE					
056940001 A01	0.006	0.006	0.006	0.0	0.005
SANTA ANA					
057180001 A01	0.007	0.007	0.008	0.009	0.008
TORRANCE					
058260001 A01	0.0	0.0	0.0	0.0	*****
COLORADO					
DENVER					
060580001 A01	0.0	0.0	0.007	0.009	*****
COLORADO (CONT)					
MONTEZUMA CO					
061400001 A01	0.0	0.0	0.0	0.0	*****
CONNECTICUT					
BRIDGEPORT					
070340001 A01	0.006	0.006	0.008	0.006	0.006
HARTFORD					
070420001 A01	0.0	0.008	0.0	0.0	*****
NEW HAVEN					
070760001 A01	0.007	0.0	0.0	0.0	*****
WATERBURY					
071240001 A01	0.0	0.0	0.0	0.0	*****
DELAWARE					
WILMINGTON					
080260001 A01	0.0	0.070	0.007	0.013	0.023
DIST COLUMBIA					
WASHINGTON					
090020001 A01	0.0	0.007	0.0	0.0	*****
FLORIDA					
JACKSONVILLE					
101360001 A01	0.0	0.0	0.0	0.0	*****
MIAMI					
101700001 A01	0.0	0.0	0.0	0.0	*****
ST PETERSBURG					
103280001 A01	0.0	0.0	0.0	0.0	*****
TAMPA					
103460001 A01	0.0	0.0	0.0	0.0	*****
GEORGIA					
ATLANTA					
110200001 A01	0.0	0.0	0.0	0.0	*****
COLUMBUS					
111280001 A01	0.0	0.0	0.0	0.0	*****
SAVANNAH					
114500001 A01	0.0	0.0	0.0	0.0	*****
HAWAII					
HONOLULU					
120120001 A01	0.0	0.0	0.0	0.0	*****
IDAHO					
BOISE CITY					
130720001 A01	0.0	0.0	0.0	0.0	*****
ILLINOIS					
CHICAGO					
141720001 A01	0.0	0.0	0.0	0.0	*****
EAST ST LOUIS					
142120001 A01	0.007	0.0	0.0	0.0	*****
JOLIET					
143760001 A01	0.0	0.005	0.007	0.0	*****
NORTH CHICAGO					
145520002 A01	0.0	0.004	0.0	0.0	*****
PEORIA					
144080001 A01	0.0	0.0	0.005	0.0	*****
ROCKFORD					
144880001 A01	0.0	0.0	0.0	0.0	*****
SPRINGFIELD					
147280001 A01	0.0	0.0	0.0	0.0	*****
INDIANA					
EAST CHICAGO					
151180001 A01	0.007	0.007	0.0	0.0	*****
EVANSVILLE					
151300001 A01	0.0	0.0	0.0	0.0	*****
FORT WAYNE					
151380001 A01	0.0	0.0	0.0	0.0	*****
GARY					
151520001 A01	0.0	0.0	0.0	0.0	*****

Table 6-3 (continued). COBALT, URBAN QUARTERLY COMPOSITES AND YEARLY AVERAGES, 1969

(ug/m^3)

LOCATION	1ST QTR.	2ND QTR.	3RD QTR.	4TH QTR.	YR. AVG.
INDIANA					
HAMMOND					
151780301 A01	10.0	10.0	10.007	10.007	******
INDIANAPOLIS					
152340301 A01	10.0	10.005	10.006	10.0	******
NEW ALBANY					
152940301 A01	10.0	10.007	10.007	10.0	******
SOUTH BEND					
153540301 A01	10.0	10.0	10.004	10.0	******
TERRE HAUTE					
154040301 A01	10.0	10.006	10.0	10.0	******
IOWA					
DAVENPORT					
161060301 A01	10.0	10.0	10.0	10.004	******
DES MOINES					
161160301 A01	10.0	10.0	10.004	10.0	******
DUBUQUE					
161260301 A01	10.009	10.0	10.0	10.0	******
KANSAS					
KANSAS CITY					
172940301 A01	10.007	10.0	10.006	10.007	10.006
TOPEKA					
173640301 A01	10.0	10.0	10.0	10.0	******
WICHITA					
173740301 A01	10.0	10.0	10.006	10.0	******
KENTUCKY					
ASHLAND					
180380301 A01	10.009	10.007	10.009	10.011	10.009
COVINGTON					
180800301 A01	10.0	10.0	10.0	10.0	******
LOUISVILLE					
180880301 A01	10.0	10.0	10.004	10.0	******
LOUISIANA					
BATON ROUGE					
190280301 A01	10.0	10.0	10.0	10.0	******
NEW ORLEANS					
192020302 A01	10.0	10.0	10.0	10.0	******
SHREVEPORT					
192740301 A01	10.0	10.0	10.0	10.0	******
MARYLAND					
BALTIMORE					
210120301 A01	10.009	10.0	10.0	10.002	******
MASSACHUSETTS					
BOSTON					
220740301 A01	10.0	10.007	10.0	10.004	******
FALL RIVER					
220980301 A01	10.0	10.0	10.0	10.0	******
SPRINGFIELD					
221160301 A01	10.0	10.0	10.0	10.0	******
WORCESTER					
221660301 A01	10.0	10.0	10.0	10.0	******
MICHIGAN					
MUSKEGON					
231160301 A01	10.0	10.0	10.0	10.0	******
DETROIT					
231180301 A01	10.0	10.0	10.0	10.007	******
FLINT					
231580301 A01	10.004	10.0	10.0	10.0	******
GRAND RAPIDS					
231830301 A01	10.005	10.005	10.0	10.0	******
LANSING					
232340301 A01	10.0	10.0	10.0	10.0	******
SAGINAW					
234760301 A01	10.0	10.0	10.0	10.0	******

LOCATION	1ST QTR.	2ND QTR.	3RD QTR.	4TH QTR.	YR. AVG.
MICHIGAN (CONT'D)					
TRENTON					
235120301 A01	10.0	10.0	10.0	10.0	******
MINNESOTA					
DULUTH					
241040301 A01	10.0	10.0	10.005	10.0	******
MINNEAPOLIS					
242260301 A01	10.0	10.0	10.0	10.0	******
ST PAUL					
243300301 A01	10.0	10.0	10.0	10.0	******
MISSOURI					
KANSAS CITY					
262380301 A01	10.0	10.0	10.0	10.0	******
ST LOUIS					
264290301 A01	10.0	10.0	10.0	10.008	******
MONTANA					
HELENA					
270720301 A01	10.0	10.0	10.0	10.0	******
NEBRASKA					
OMAHA					
281480301 A01	10.0	10.0	10.0	10.0	******
NEVADA					
LAS VEGAS					
290320301 A01	10.0	10.0	10.0	10.0	******
RENO					
290480301 A01	10.006	10.0	10.007	10.008	10.006
NEW HAMPSHIRE					
CONCORD					
300120301 A01	10.0	10.0	10.0	10.0	******
NEW JERSEY					
BURLINGTON CO					
317660302 A01	10.0	10.0	10.0	10.0	******
ELIZABETH					
311300301 A01	10.0	10.0	10.0	10.0	******
GLASSBORO					
317700301 A01	10.0	10.0	10.0	10.0	******
HAMILTON					
311340301 A01	10.006	10.0	10.0	10.0	******
JERSEY CITY					
312320301 A01	10.007	10.006	10.005	10.0	10.005
NEWARK					
313480301 A01	10.006	10.0	10.006	10.0	******
PATERSON					
314140301 A01	10.0	10.0	10.0	10.0	******
PERTH AMBOY					
314320301 A01	10.0	10.0	10.0	10.0	******
TRENTON					
315420301 A01	10.004	10.006	10.0	10.006	10.005
NEW MEXICO					
ALBUQUERQUE					
320040301 A01	10.0	10.0	10.0	10.0	******
NEW YORK					
ALBANY					
330060301 A01	10.0	10.0	10.0	10.0	******
BUFFALO					
330660301 A01	10.0	10.006	10.0	10.007	******
NEW YORK CITY					
334580301 A01	10.013	10.009	10.0	10.008	10.008
NIAGARA FALLS					
334740301 A01	10.0	10.006	10.014	10.0	******
ROCHESTER					
335760301 A01	10.0	10.0	10.0	10.0	******
SYRACUSE					
336420301 A01	10.0	10.0	10.0	10.0	******

Table 6-3 (continued). COBALT, URBAN QUARTERLY COMPOSITES AND YEARLY AVERAGES, 1969

($\mu g/m^3$)

LOCATION	1ST QTR.	2ND QTR.	3RD QTR.	4TH QTR.	YR. AVG.
NEW YORK					
UTICA					
360440001 A01	10.0	10.0	.0	10.0	*****
NORTH CAROLINA					
CHARLOTTE					
370730001 A01	10.00?	10.0	10.0	10.0	*****
DURHAM					
371130001 A01	10.0	10.0	10.0	10.0	*****
GREENSBORO					
374430001 A01	10.0	10.0	10.0	10.00A	*****
WINSTON-SALEM					
376630001 A01	10.00A	10.0	10.0	10.00A	*****
NORTH DAKOTA					
BISMARCK					
380150001 A01	10.0	10.0	10.0	10.0	*****
OHIO					
AKRON					
390310001 A01	10.0	10.0	10.0	10.0	*****
CANTON					
390090001 A01	10.0	10.0	10.0	10.0	*****
CINCINNATI					
390150001 A01	10.0	10.0	10.0	10.00?	*****
CLEVELAND					
390350001 A01	10.0	10.00?	10.0	10.0	*****
COLUMBUS					
390490001 A01	10.0	10.0	10.00?	10.0	*****
DAYTON					
390570001 A01	10.0	10.0	10.0	10.0	*****
TOLEDO					
390950001 A01	10.0	10.0	10.0	10.0	*****
YOUNGSTOWN					
391550001 A01	10.00A	10.0	10.0	10.0	*****
OKLAHOMA					
OKLAHOMA CITY					
400920001 A01	10.0	10.0	10.0	10.0	*****
TULSA					
401430001 A01	10.0	10.0	10.0	10.0	*****
OREGON					
PORTLAND					
381140001 A01	10.0	10.0	10.0	10.0	*****
PENNSYLVANIA					
ALLENTOWN					
410150001 A01	10.0	10.0	10.0	10.0	*****
BETHLEHEM					
410770001 A01	10.0	10.0	10.0	10.0	*****
ERIE					
410940001 A01	10.0	10.0	10.0	10.0	*****
HARRISBURG					
411830001 A01	10.0	10.0	10.0	10.0	*****
HAZLETON					
411960001 A01	10.0	10.0	10.0	10.0	*****
JOHNSTOWN					
412660001 A01	10.0	10.0	10.00A	10.0	*****
PHILADELPHIA					
421140001 A01	10.00	10.00	10.00A	10.0	*****
PITTSBURGH					
421420001 A01	10.0	10.0	10.00A	10.0	*****
READING					
421740001 A01	10.00A	10.00A	10.00A	10.0	10.00?
SCRANTON					
422040001 A01	10.00A	10.00A	10.00A	10.00A	10.00?
WARMINSTER					
422160001 A01	10.0	10.0	10.0	10.0	*****

LOCATION	1ST QTR.	2ND QTR.	3RD QTR.	4TH QTR.	YR. AVG.
WASHINGTON (CONT)					
WEST CHESTER					
422920001 A01	10.0	10.0	10.0	10.0	*****
WILKES-BARRE					
423470001 A01	10.0	10.0	10.0	10.0	*****
YORK					
423540001 A01	10.0	10.0	10.0	10.00A	*****
PUERTO RICO					
BAYAMON					
400440001 A01	10.0	10.0	10.0	10.0	*****
CATANO					
400560001 A01	10.0	10.0	10.0	10.0	*****
GUAYANILLA					
401380001 A01	10.0	10.0	10.0	10.0	*****
PONCE					
401920001 A01	10.0	10.0	10.0	10.0	*****
SAN JUAN					
402140001 A01	10.0	10.0	10.0	10.0	*****
RHODE ISLAND					
EAST PROVIDENCE					
410120001 A01	10.0	10.0	10.0	10.0	*****
PROVIDENCE					
410330001 A01	10.0	10.0	10.0	10.00A	*****
SOUTH CAROLINA					
COLUMBIA					
420740001 A01	10.0	10.0	10.0	10.0	*****
GREENVILLE					
421190001 A01	10.0	10.0	10.0	10.0	*****
TENNESSEE					
CHATTANOOGA					
440360001 A01	10.00	10.00	10.00?	10.0	*****
KNOXVILLE					
440740001 A01	10.0	10.0	10.0	10.0	*****
MEMPHIS					
447140001 A01	10.00	10.00	10.00A	10.0	*****
NASHVILLE					
447540001 A01	10.0	10.00A	10.0	10.01?	*****
TEXAS					
DALLAS					
451210337 A01	10.0	10.0	10.0	10.0	*****
EL PASO					
451700301 A01	10.0	10.01?	10.0	10.0	*****
FORT WORTH					
451890001 A01	10.0	10.0	10.0	10.0	*****
HOUSTON					
452540001 A01	10.0	10.0	10.0	10.0	*****
PASADENA					
453400001 A01	10.0	10.0	10.0	10.0	*****
SAN ANTONIO					
454670001 A01	10.0	10.0	10.0	10.0	*****
UTAH					
OGDEN					
460440001 A01	10.0	10.0	10.0	10.0	*****
SALT LAKE CITY					
460920001 A01	10.0	10.0	10.0	10.0	*****
VERMONT					
BURLINGTON					
470140001 A01	10.0	10.0	10.0	10.0	*****
VIRGINIA					
DANVILLE					
480970001 A01	10.0	10.0	10.0	10.0	*****
HAMPTON					
481440001 A01	10.0	10.0	10.0	10.0	*****

Table 6-3 (continued). COBALT, URBAN QUARTERLY COMPOSITES AND YEARLY AVERAGES, 1969

($\mu g/m^3$)

LOCATION	1ST QTR.	2ND QTR.	3RD QTR.	4TH QTR.	YR. AVG.
VIRGINIA					
LYNCHBURG					
481840001 A01	0.0	0.0	0.0	0.0	*****
NEWPORT NEWS					
482120001 A01	0.0	0.0	0.0	0.0	*****
NORFOLK					
482140001 A01	0.0	0.0	0.0	0.0	*****
PORTSMOUTH					
482440001 A01	0.006	0.0	0.0	0.0	*****
RICHMOND					
482560001 A01	0.0	0.0	0.0	0.0	*****
ROANOKE					
482700001 A01	0.0	0.0	0.0	0.007	*****
WASHINGTON					
SEATTLE					
481840001 A01	0.0	0.0	0.0	0.0	*****
SPOKANE					
482140001 A01	0.0	0.0	0.0	0.0	*****
TACOMA					
482140001 A01	0.006	0.006	0.0	0.0	*****

LOCATION	1ST QTR.	2ND QTR.	3RD QTR.	4TH QTR.	YR. AVG.
WEST VIRGINIA					
CHARLESTON					
500780001 A01	0.015	0.026	0.015	0.008	0.016
WISCONSIN					
EAU CLAIRE					
510840001 A01	0.0	0.0	0.0	0.0	*****
KENOSHA					
511540001 A01	0.0	0.006	0.0	0.005	*****
MADISON					
511860001 A01	0.0	0.0	0.0	0.0	*****
MILWAUKEE					
512700001 A01	0.0	0.0	0.0	0.0	*****
RACINE					
512880001 A01	0.0	0.0	0.0	0.0	*****
SUPERIOR					
513480001 A01	0.0	0.0	0.0	0.0	*****
WYOMING					
CASPER					
530120001 A01	0.0	0.0	0.0	0.0	*****
CHEYENNE					
530140001 A01	0.0	0.0	0.0	0.0	*****

Table 6-4. COBALT, NONURBAN QUARTERLY COMPOSITES AND YEARLY AVERAGES, 1969

($\mu g/m^3$)

LOCATION	1ST QTR.	2ND QTR.	3RD QTR.	4TH QTR.	YR. AVG.
ARIZONA					
GRAND CANYON NAT PA					
040370001 A03	0.0	0.0	0.0	0.0	*****
ARKANSAS					
MONTGOMERY CO					
051760001 A03	0.0	0.0	0.0	0.0	*****
CALIFORNIA					
HUMBOLDT CO					
060230001 A03	0.0	0.0	0.0	0.0	*****
FLORIDA					
HARDEE CO					
120490001 A03	0.0	0.0	0.0	0.0	*****
IDAHO					
BUTTE CO					
160430001 A03	0.012	0.0	0.0	0.0	*****
INDIANA					
MONROE CO					
182490001 A03	0.0	0.0	0.0	0.0	*****
PARKE CO					
183290001 A03	0.0	0.0	0.0	0.0	*****
MAINE					
ACADIA NAT PARK					
200010001 A03	0.0	0.0	0.0	0.0	*****
MARYLAND					
CALVERT CO					
210540001 A03	0.0	0.0	0.0	0.0	*****
MISSOURI					
SHANNON CO					
264440002 A03	0.0	0.0	0.0	0.0	*****
MONTANA					
GLACIER NAT PARK					
270570001 A03	0.0	0.0	0.0	0.0	*****
NEBRASKA					
THOMAS CO					
282480001 A03	0.0	0.0	0.0	0.0	*****
NEVADA					
WHITE PINE CO					
290560001 A03	0.0	0.0	0.0	0.0	*****
NEW HAMPSHIRE					
COOS CO					
300140001 A03	0.0	0.0	0.0	0.0	*****
NEW YORK					
JEFFERSON CO					
333340001 A03	0.0	0.0	0.0	0.0	*****
NORTH CAROLINA					
CAPE HATTERAS NAT					
340590001 A03	0.0	0.0	0.0	0.0	*****
OKLAHOMA					
CHEROKEE CO					
370440001 A03	0.0	0.0	0.0	0.0	*****
OREGON					
CURRY CO					
380440001 A03	0.0	0.0	0.0	0.0	*****
PENNSYLVANIA					
CLARION CO					
391760001 A03	0.0	0.0	0.0	0.0	*****
RHODE ISLAND					
WASHINGTON CO					
410380002 A03	0.0	0.0	0.0	0.0	*****
SOUTH CAROLINA					
RICHLAND CO					
421900301 A03	0.0	0.0	0.0	0.0	*****
SOUTH DAKOTA					
BLACK HILLS NAT FO					
430110001 A03	0.0	0.0	0.0	0.0	*****
TENNESSEE					
CUMBERLAND CO					
440680001 A03	0.0	0.0	0.0	0.0	*****
TEXAS					
MATAGORDA CO					
483630001 A03	0.0	0.0	0.0	0.0	*****
VERMONT					
ORANGE CO					
470340001 A03	0.0	0.0	0.0	0.0	*****
VIRGINIA					
SHENANDOAH NAT PAR					
492890001 A03	0.002	0.0	0.0	0.0	*****
WYTHE CO					
483440001 A03	0.0	0.0	0.0	0.0	*****
WISCONSIN					
DOOR CO					
510780301 A03	0.0	0.0	0.0	0.0	*****
WYOMING					
YELLOWSTONE NAT PA					
520860001 A03	0.0	0.0	0.0	0.0	*****

SECTION 7. URBAN AND NONURBAN METALS IN SUSPENDED PARTICULATES: COPPER

Table 7-1. COPPER, URBAN FREQUENCY DISTRIBUTIONS, 1968

($\mu g/m^3$)

LOCATION	NO. SAMP.	MIN.	FREQUENCY DISTRIBUTION, %									MAX.	ARITHMETIC		GEOMETRIC	
			10	20	30	40	50	60	70	80	90		MEAN	STD. DEV.	MEAN	STD. DEV.
ALABAMA																
GADSDEN																
011480001 A01	25	0.0	0.0	0.0	0.0	0.0	0.03	0.04	0.05	0.05	0.10	0.24				
HUNTSVILLE																
011860001 A01	26	0.08	0.10	0.15	0.18	0.21	0.22	0.29	0.38	0.46	0.50	0.75	0.29	0.17	0.25	1.84
MOBILE																
012380001 A01	25	0.04	0.08	0.09	0.11	0.11	0.14	0.14	0.16	0.16	0.22	0.29	0.14	0.06	0.13	1.53
MONTGOMERY																
012460001 A01	26	0.0	NO. OF SAMPLES (19) BELOW MIN. DET. EXCEEDS 50%									0.35				
ALASKA																
ANCHORAGE																
020040003 A01	26	0.0	NO. OF SAMPLES (16) BELOW MIN. DET. EXCEEDS 50%									0.06				
FAIRBANKS																
020160001 A01	23	0.17	0.18	0.22	0.26	0.39	0.43	0.45	0.50	0.51	0.79	1.10	0.45	0.24	0.39	1.70
ARIZONA																
MARICOPA CO																
030460001 A01	25	0.0	0.0	0.0	0.03	0.04	0.04	0.04	0.05	0.06	0.09	0.10				
PHOENIX																
030600002 A01	26	0.0	0.0	0.03	0.04	0.04	0.04	0.06	0.07	0.08	0.12	0.22	0.06	0.05	0.04	2.81
TUCSON																
030860001 A01	26	0.10	0.15	0.26	0.35	0.40	0.42	0.46	0.52	0.54	0.71	0.74	0.42	0.18	0.38	1.74
ARKANSAS																
LITTLE ROCK																
041440001 A01	25	0.0	NO. OF SAMPLES (14) BELOW MIN. DET. EXCEEDS 50%									0.30				
TEXARKANA																
042560001 A01	25	0.0	0.03	0.04	0.04	0.05	0.05	0.06	0.06	0.07	0.08	0.11	0.05	0.02	0.05	1.78
WEST MEMPHIS																
042740001 A01	26	0.0	0.06	0.07	0.08	0.09	0.09	0.11	0.11	0.12	0.14	0.24	0.10	0.04	0.09	1.97
CALIFORNIA																
BURBANK																
050900001 A01	26	0.0	0.03	0.04	0.04	0.05	0.05	0.07	0.09	0.10	0.14	0.29	0.08	0.06	0.06	2.15
GLENDALE																
052940001 A01	25	0.0	0.04	0.04	0.05	0.06	0.11	0.20	0.26	0.27	0.37	0.40	0.17	0.13	0.11	2.98
LONG BEACH																
054100001 A01	26	0.0	0.0	0.04	0.04	0.05	0.06	0.07	0.07	0.08	0.09	0.13	0.06	0.03	0.05	2.44
LOS ANGELES																
054180001 A01	26	0.0	0.0	0.04	0.04	0.05	0.05	0.06	0.08	0.09	0.12	0.23	0.07	0.05	0.05	2.87
OAKLAND																
055300001 A01	25	0.05	0.05	0.06	0.06	0.07	0.08	0.09	0.10	0.12	0.14	0.24	0.09	0.04	0.08	1.50
ONTARIO																
055380001 A01	24	0.0	0.09	0.11	0.12	0.12	0.13	0.14	0.15	0.17	0.20	0.28	0.14	0.05	0.12	2.07
PASADENA																
055760001 A01	25	0.21	0.24	0.25	0.31	0.37	0.43	0.46	0.65	0.81	0.87	2.80	0.62	0.60	0.48	1.94
RIVERSIDE																
056400001 A01	26	0.0	0.03	0.03	0.03	0.04	0.04	0.05	0.06	0.06	0.08	0.15	0.05	0.03	0.04	2.11
SACRAMENTO																
056580001 A01	26	0.0	0.0	0.03	0.03	0.04	0.05	0.05	0.06	0.08	0.14	0.26	0.06	0.06	0.04	2.93
SAN BERNARDINO																
056680001 A01	26	0.0	0.03	0.05	0.06	0.07	0.07	0.07	0.08	0.10	0.12	0.19	0.08	0.04	0.06	2.33
SAN DIEGO																
056800001 A01	26	0.05	0.06	0.08	0.10	0.11	0.14	0.20	0.28	0.29	0.37	0.81	0.20	0.17	0.16	2.06
SAN FRANCISCO																
056860001 A01	26	0.0	0.0	0.0	0.0	0.03	0.03	0.05	0.06	0.06	0.07	0.11				
COLORADO																
DENVER																
060580001 A01	24	0.0	0.04	0.05	0.05	0.07	0.08	0.10	0.11	0.18	0.20	0.24	0.10	0.06	0.08	2.25
CONNECTICUT																
HARTFORD																
070420001 A01	26	0.0	0.0	0.0	0.0	0.0	0.03	0.04	0.05	0.05	0.07	0.11				
NEW HAVEN																
070700001 A01	26	0.0	0.03	0.03	0.06	0.08	0.08	0.10	0.13	0.15	0.17	0.38	0.10	0.08	0.07	2.72
DELAWARE																
NEWARK																
080140001 A01	24	0.08	0.12	0.19	0.25	0.26	0.27	0.35	0.44	0.47	0.51	0.60	0.32	0.15	0.25	1.73
WILMINGTON																
080260001 A01	23	0.0	0.09	0.09	0.11	0.14	0.16	0.20	0.25	0.26	0.28	0.38	0.18	0.09	0.14	2.41

Table 7-1 (continued). COPPER, URBAN FREQUENCY DISTRIBUTIONS, 1968

($\mu g/m^3$)

LOCATION	NO. SAMP.	MIN.	FREQUENCY DISTRIBUTION, %									MAX.	ARITHMETIC		GEOMETRIC	
			10	20	30	40	50	60	70	80	90		MEAN	STD. DEV.	MEAN	STD. DEV.
DIST COLUMBIA WASHINGTON 090020001 A01	26	0.0	0.0	0.0	0.0	0.03	0.03	0.04	0.04	0.05	0.06	0.30				
FLORIDA JACKSONVILLE 101960002 A01	25	0.06	0.07	0.11	0.12	0.17	0.18	0.20	0.25	0.28	0.32	0.53	0.20	0.11	0.18	1.79
FLORIDA TAMPA 104360002 A01	23	0.03	0.04	0.04	0.05	0.07	0.07	0.09	0.11	0.14	0.19	0.39	0.11	0.09	0.08	1.99
GEORGIA ATLANTA 110200001 A01	26	0.0	NO. OF SAMPLES (<) BELOW MIN. DET. EXCEEDS 50%									0.11				
HAWAII HONOLULU 120120001 A01	26	0.0	0.04	0.06	0.07	0.08	0.08	0.11	0.12	0.16	0.17	0.25	0.10	0.06	0.08	2.16
IDAHO BOISE CITY 130220001 A01	26	0.17	0.32	0.85	1.20	1.50	1.70	2.50	2.60	3.20	3.80	7.40	2.21	1.76	1.56	2.59
ILLINOIS CHICAGO 141220001 A01	25	0.03	0.05	0.08	0.10	0.10	0.12	0.14	0.19	0.19	0.22	0.23	0.13	0.06	0.12	1.69
EAST ST LOUIS 142120001 A01	25	0.0	0.03	0.04	0.04	0.06	0.07	0.13	0.15	0.15	0.34	0.45	0.12	0.12	0.08	2.77
JOLIET 143760001 A01	21	0.0	0.0	0.03	0.05	0.05	0.05	0.06	0.07	0.08	0.11	0.16	0.06	0.04	0.04	3.03
ROCKFORD 146680001 A01	25	0.0	0.0	0.0	0.02	0.03	0.03	0.04	0.05	0.07	0.10	0.19				
SPRINGFIELD 147280001 A01	23	0.0	0.0	0.0	0.02	0.03	0.03	0.03	0.04	0.05	0.18	0.32				
INDIANA EAST CHICAGO 151180001 A01	26	0.06	0.07	0.11	0.14	0.17	0.19	0.23	0.31	0.43	0.75	1.40	0.31	0.31	0.22	2.30
HAMMOND 151780001 A01	26	0.0	0.0	0.0	0.0	0.04	0.05	0.06	0.08	0.09	0.24	0.47				
INDIANAPOLIS 152040001 A01	25	0.05	0.06	0.07	0.08	0.08	0.10	0.11	0.12	0.13	0.19	0.22	0.11	0.05	0.10	1.50
SOUTH BEND 153980001 A01	24	0.05	0.07	0.08	0.10	0.10	0.12	0.14	0.15	0.17	0.42	0.47	0.16	0.12	0.13	1.80
IOWA CEDAR RAPIDS 160640001 A01	26	0.0	NO. OF SAMPLES (<) BELOW MIN. DET. EXCEEDS 50%									0.14				
DES MOINES 161180001 A01	26	0.0	NO. OF SAMPLES (<) BELOW MIN. DET. EXCEEDS 50%									0.09				
DUBUQUE 161260001 A01	23	0.0	0.08	0.16	0.19	0.22	0.24	0.27	0.28	0.42	0.54	1.70	0.35	0.39	0.22	3.13
KANSAS KANSAS CITY 171800001 A01	25	0.04	0.05	0.06	0.07	0.09	0.10	0.11	0.13	0.16	0.17	0.71	0.13	0.13	0.10	1.86
TOPEKA 173560001 A01	26	0.0	0.03	0.06	0.07	0.09	0.10	0.14	0.22	0.32	0.39	0.73	0.19	0.18	0.12	2.97
WICHITA 173740001 A01	25	0.06	0.12	0.15	0.17	0.22	0.26	0.26	0.45	0.52	0.83	1.80	0.41	0.42	0.29	2.31
KENTUCKY ASHLAND 180080002 A01	23	0.05	0.07	0.10	0.12	0.18	0.18	0.20	0.21	0.25	0.39	1.10	0.22	0.21	0.18	1.93
COVINGTON 180800001 A01	25	0.02	0.03	0.04	0.05	0.06	0.08	0.08	0.08	0.09	0.15	0.17	0.08	0.04	0.07	1.65
LEXINGTON 182300001 A01	24	0.0	0.04	0.04	0.07	0.08	0.09	0.10	0.11	0.12	0.14	0.15	0.09	0.04	0.07	2.46
LOUISVILLE 182380001 A01	25	0.0	0.09	0.16	0.23	0.29	0.35	0.42	0.44	0.49	0.59	0.79	0.35	0.19	0.27	2.83
LOUISIANA NEW ORLEANS 192020002 A01	25	0.04	0.04	0.04	0.05	0.06	0.07	0.08	0.09	0.12	0.15	0.48	0.10	0.09	0.08	1.87
MAINE PORTLAND 200960002 A01	21	0.04	0.04	0.05	0.06	0.08	0.08	0.09	0.14	0.22	0.28	0.54	0.15	0.15	0.10	2.22
MARYLAND BALTIMORE 210120001 A01	26	0.20	0.30	0.35	0.45	0.76	0.81	1.00	1.50	1.60	2.30	5.70	1.26	1.27	0.87	2.38

Table 7-1 (continued). COPPER, URBAN FREQUENCY DISTRIBUTIONS, 1968

($\mu g/m^3$)

LOCATION	NO. SAMP.	MIN.	FREQUENCY DISTRIBUTION, %									MAX.	ARITHMETIC		GEOMETRIC	
			10	20	30	40	50	60	70	80	90		MEAN	STD. DEV.	MEAN	STD. DEV.
MASSACHUSETTS																
BOSTON 220240001 A01	25	0.0	0.04	0.05	0.06	0.06	0.07	0.08	0.09	0.09	0.13	0.16	0.07	0.04	0.06	2.29
WORCHESTER 222640001 A01	24	0.0	0.0	0.0	0.03	0.03	0.04	0.05	0.05	0.07	0.08	0.14	0.05	0.04	0.03	3.06
MICHIGAN																
DETROIT 231180001 A01	26	0.0	0.0	0.03	0.04	0.07	0.08	0.09	0.10	0.10	0.16	0.23	0.08	0.05	0.05	3.36
FLINT 231580001 A01	26	0.0	NO. OF SAMPLES (15) BELOW MIN. DET. EXCEEDS 50%									0.16				
GRAND RAPIDS 231820001 A01	26	0.03	0.13	0.16	0.17	0.19	0.21	0.25	0.27	0.31	0.37	0.58	0.23	0.11	0.20	1.79
TRENTON 235120001 A01	25	0.0	0.0	0.02	0.05	0.05	0.06	0.07	0.12	0.13	0.16	0.22	0.08	0.06	0.05	3.27
MINNESOTA																
DULUTH 241040001 A01	23	0.0	0.0	0.0	0.0	0.04	0.04	0.06	0.07	0.10	0.12	0.18				
MINNEAPOLIS 242260001 A01	26	0.02	0.04	0.05	0.06	0.06	0.06	0.07	0.10	0.13	0.15	0.29	0.09	0.06	0.08	1.81
MOORHEAD 242320001 A01	26	0.0	NO. OF SAMPLES (14) BELOW MIN. DET. EXCEEDS 50%									0.07				
ST PAUL 243300001 A01	26	0.0	0.05	0.06	0.07	0.08	0.08	0.10	0.11	0.12	0.15	0.72	0.11	0.13	0.08	2.64
MISSISSIPPI																
JACKSON 251260002 A01	26	0.0	NO. OF SAMPLES (14) BELOW MIN. DET. EXCEEDS 50%									0.11				
MISSOURI																
KANSAS CITY 262380001 A01	24	0.0	NO. OF SAMPLES (19) BELOW MIN. DET. EXCEEDS 50%									0.03				
MONTANA																
HELENA 270720001 A01	24	0.0	0.0	0.03	0.05	0.07	0.07	0.11	0.18	0.58	0.73	0.95	0.23	0.29	0.08	5.25
NEBRASKA																
OMAHA 281880001 A01	25	0.0	0.03	0.05	0.05	0.07	0.07	0.08	0.10	0.12	0.15	0.23	0.09	0.05	0.07	2.49
NEVADA																
LAS VEGAS 290320001 A01	24	0.0	NO. OF SAMPLES (16) BELOW MIN. DET. EXCEEDS 50%									0.12				
RENO 290480001 A01	25	0.0	0.0	0.0	0.0	0.0	0.03	0.04	0.04	0.04	0.07	0.14				
NEW HAMPSHIRE																
CONCORD 300120001 A01	25	0.07	0.09	0.09	0.10	0.11	0.12	0.15	0.18	0.22	0.40	0.49	0.17	0.12	0.15	1.76
NEW JERSEY																
BAYONNE 310180001 A01	21	0.03	0.03	0.05	0.05	0.07	0.08	0.12	0.15	0.16	0.22	0.24	0.11	0.07	0.08	2.08
BURLINGTON CO 310660002 A01	25	0.0	0.04	0.06	0.09	0.09	0.12	0.13	0.16	0.18	0.19	0.45	0.13	0.09	0.10	2.36
CAMDEN 310720001 A01	26	0.0	0.04	0.04	0.05	0.06	0.06	0.11	0.12	0.13	0.16	0.22	0.09	0.06	0.07	2.54
GLASSBORO 311700001 A01	25	0.02	0.04	0.05	0.10	0.20	0.25	0.36	0.39	0.44	0.54	0.65	0.28	0.19	0.19	2.41
HAMILTON 311940001 A01	21	0.0	0.0	0.0	0.0	0.03	0.03	0.04	0.04	0.04	0.05	0.07				
JERSEY CITY 312320001 A01	25	0.0	0.0	0.04	0.05	0.05	0.06	0.07	0.08	0.09	0.15	0.35	0.08	0.07	0.05	2.84
NEWARK 313480001 A01	24	0.0	0.02	0.04	0.07	0.07	0.09	0.13	0.18	0.24	0.33	0.36	0.14	0.11	0.08	3.26
PATERSON 314140001 A01	25	0.0	0.0	0.0	0.0	0.0	0.03	0.03	0.05	0.06	0.09	0.13				
PERTH AMBOY 314220001 A01	26	0.13	0.14	0.18	0.22	0.26	0.29	0.31	0.51	0.58	0.89	1.70	0.42	0.35	0.33	1.96
TRENTON 315400001 A01	24	0.05	0.07	0.08	0.12	0.14	0.16	0.19	0.25	0.34	0.39	0.45	0.20	0.12	0.16	1.92
NEW MEXICO																
ALBUQUERQUE 320040001 A01	24	0.06	0.09	0.10	0.15	0.16	0.17	0.20	0.20	0.26	0.45	0.60	0.21	0.13	0.18	1.76

Table 7-1 (continued). COPPER, URBAN FREQUENCY DISTRIBUTIONS, 1968

($\mu g/m^3$)

LOCATION	NO. SAMP.	MIN.	FREQUENCY DISTRIBUTION, %									MAX.	ARITHMETIC		GEOMETRIC	
			10	20	30	40	50	60	70	80	90		MEAN	STD. DEV.	MEAN	STD. DEV.
NORTH CAROLINA																
CHARLOTTE																
340700001 A01	25	0.0	0.03	0.04	0.04	0.04	0.05	0.05	0.06	0.07	0.09	0.11	0.05	0.03	0.04	2.10
DURHAM																
341160001 A01	23	0.0	0.03	0.04	0.05	0.06	0.07	0.08	0.08	0.09	0.16	0.35	0.09	0.07	0.07	2.21
NORTH DAKOTA																
BISMARCK																
350100001 A01	25	0.0	0.0	0.0	0.02	0.03	0.03	0.04	0.05	0.06	0.09	0.16				
OHIO																
AKRON																
360060001 A01	25	0.02	0.04	0.06	0.06	0.07	0.08	0.09	0.10	0.11	0.15	0.17	0.09	0.04	0.08	1.59
CINCINNATI																
361220001 A01	26	0.08	0.09	0.15	0.18	0.21	0.23	0.24	0.33	0.41	0.64	0.70	0.28	0.18	0.24	1.84
CLEVELAND																
361300001 A01	26	0.03	0.04	0.07	0.08	0.08	0.09	0.12	0.14	0.16	0.21	0.24	0.11	0.06	0.10	1.77
COLUMBUS																
361460001 A01	24	0.0	0.05	0.06	0.08	0.08	0.09	0.11	0.12	0.16	0.23	0.31	0.11	0.07	0.09	2.26
DAYTON																
361660001 A01	26	0.0	0.04	0.05	0.05	0.07	0.08	0.11	0.13	0.16	0.23	0.30	0.11	0.08	0.08	2.69
TOLEDO																
366600001 A01	23	0.02	0.03	0.03	0.04	0.05	0.05	0.06	0.07	0.07	0.09	0.10	0.06	0.02	0.05	1.48
YOUNGSTOWN																
367760001 A01	25	0.0	0.0	0.0	0.03	0.03	0.05	0.05	0.06	0.07	0.09	0.12	0.05	0.03	0.03	3.01
OKLAHOMA																
OKLAHOMA CITY																
372200001 A01	22	0.0	0.04	0.05	0.05	0.06	0.07	0.08	0.10	0.14	0.19	0.39	0.11	0.09	0.08	2.42
TULSA																
373000001 A01	24	0.0	NO. OF SAMPLES (20) BELOW MIN. DET. EXCEEDS 50%									0.10				
OREGON																
MEDFORD																
381160001 A01	25	0.0	NO. OF SAMPLES (15) BELOW MIN. DET. EXCEEDS 50%									0.09				
PORTLAND																
381460001 A01	26	0.03	0.05	0.06	0.07	0.07	0.09	0.09	0.10	0.11	0.16	0.22	0.09	0.04	0.08	1.55
PENNSYLVANIA																
ALLENTOWN																
390120001 A01	26	0.03	0.04	0.05	0.06	0.08	0.08	0.10	0.11	0.13	0.20	0.24	0.10	0.05	0.09	1.71
ALTOONA																
390140001 A01	23	0.17	0.21	0.27	0.28	0.30	0.32	0.35	0.40	0.51	0.53	0.71	0.36	0.13	0.34	1.43
BETHLEHEM																
390780002 A01	24	0.02	0.06	0.07	0.12	0.12	0.12	0.15	0.18	0.29	0.32	0.87	0.18	0.17	0.14	2.13
HARRISBURG																
393880001 A01	26	0.05	0.06	0.07	0.08	0.09	0.10	0.11	0.11	0.11	0.13	0.26	0.10	0.04	0.10	1.40
HAZLETON																
393960001 A01	24	0.0	0.05	0.06	0.07	0.08	0.11	0.14	0.15	0.23	0.26	0.53	0.14	0.11	0.10	2.46
JOHNSTOWN																
394460001 A01	23	0.02	0.03	0.04	0.04	0.05	0.05	0.05	0.07	0.10	0.14	0.24	0.07	0.05	0.06	1.84
PHILADELPHIA																
397140001 A01	26	0.04	0.05	0.06	0.07	0.11	0.1.	0.13	0.15	0.21	0.55	0.96	0.19	0.22	0.13	2.25
PITTSBURGH																
397260001 A01	26	0.03	0.06	0.07	0.08	0.10	0.13	0.14	0.17	0.19	0.22	0.33	0.14	0.07	0.12	1.78
READING																
397620001 A01	25	0.0	0.04	0.05	0.10	0.10	0.13	0.16	0.16	0.19	0.48	0.65	0.17	0.17	0.12	2.73
SCRANTON																
398040001 A01	25	0.0	0.0	0.03	0.03	0.03	0.04	0.04	0.06	0.06	0.13	0.20	0.05	0.05	0.04	2.78
WARMINSTER																
399160001 A01	25	0.07	0.08	0.09	0.10	0.11	0.11	0.13	0.14	0.17	0.24	0.31	0.14	0.06	0.13	1.46
WEST CHESTER																
399280001 A01	24	0.0	0.23	0.29	0.36	0.41	0.45	0.47	0.52	0.68	0.76	1.10	0.48	0.25	0.38	2.79
WILKES-BARRE																
399430001 A01	24	0.0	NO. OF SAMPLES (13) BELOW MIN. DET. EXCEEDS 50%									0.14				
YORK																
399560001 AC1	25	0.0	0.0	0.0	0.07	0.10	0.11	0.12	0.15	0.18	0.19	0.22	0.11	0.07	0.06	3.90
PUERTO RICO																
BAYAMON																
400380001 A01	25	0.0	NO. OF SAMPLES (17) BELOW MIN. DET. EXCEEDS 50%									0.18				
CATANO																
400560001 A01	25	0.0	NO. OF SAMPLES (14) BELOW MIN. DET. EXCEEDS 50%									0.16				

Table 7-1 (continued). COPPER, URBAN FREQUENCY DISTRIBUTIONS, 1968

($\mu g/m^3$)

LOCATION	NO. SAMP.	MIN.	FREQUENCY DISTRIBUTION, %									MAX.	ARITHMETIC		GEOMETRIC	
			10	20	30	40	50	60	70	80	90		MEAN	STD. DEV.	MEAN	STD. DEV.
PUERTO RICO																
GUAYANILLA																
401080001 A01	25	0.0	0.0	0.0	0.0	0.0	0.02	0.02	0.04	0.04	0.07	0.11				
PONCE																
401920001 A01	25	0.0	NO. OF SAMPLES (24) BELOW MIN. DET. EXCEEDS 50%									0.04				
RHODE ISLAND																
EAST PROVIDENCE																
410120001 A01	26	0.04	0.06	0.10	0.13	0.15	0.15	0.21	0.28	0.30	0.39	0.52	0.20	0.13	0.16	1.99
PROVIDENCE																
410300001 A01	25	0.10	0.11	0.13	0.16	0.19	0.22	0.24	0.25	0.36	0.51	0.53	0.25	0.14	0.22	1.69
SOUTH CAROLINA																
COLUMBIA																
420760001 A01	24	0.19	0.35	0.40	0.47	0.51	0.52	0.57	0.62	0.74	0.90	0.97	0.57	0.20	0.54	1.45
GREENVILLE																
421180001 A01	25	0.0	0.0	0.0	0.03	0.04	0.04	0.05	0.05	0.06	0.08	3.60	0.18	0.71	0.03	4.17
SOUTH DAKOTA																
SIOUX FALLS																
431480001 A01	22	0.0	0.0	0.0	0.02	0.05	0.07	0.09	0.12	0.14	0.17	1.00				
TENNESSEE																
CHATTANOOGA																
440380001 A01	25	0.08	0.20	0.34	0.40	0.47	0.59	0.71	0.74	0.82	1.60	4.40	0.82	0.89	0.56	2.41
KNOXVILLE																
441740001 A01	26	0.0	0.0	0.0	0.0	0.0	0.03	0.03	0.04	0.04	0.05	0.10				
MEMPHIS																
442340001 A01	25	0.0	NO. OF SAMPLES (16) BELOW MIN. DET. EXCEEDS 50%									0.15				
NASHVILLE																
442540001 A01	25	0.0	0.0	0.0	0.03	0.03	0.05	0.05	0.07	0.12	0.20	0.47	0.09	0.12	0.04	4.08
TEXAS																
DALLAS																
451310002 A01	26	0.0	0.02	0.05	0.07	0.12	0.12	0.13	0.16	0.23	0.47	0.52	0.16	0.14	0.10	3.20
HOUSTON																
452560001 A01	26	0.0	0.03	0.03	0.03	0.05	0.07	0.10	0.13	0.16	0.23	0.29	0.10	0.08	0.06	2.98
PASADENA																
454060001 A01	26	0.0	NO. OF SAMPLES (21) BELOW MIN. DET. EXCEEDS 50%									0.07				
SAN ANTONIO																
454570001 A01	25	0.0	0.0	0.0	0.02	0.03	0.04	0.04	0.04	0.07	0.09	0.10	0.04	0.03	0.03	2.69
UTAH																
OGDEN																
460680001 A01	25	0.0	0.03	0.04	0.07	0.08	0.10	0.10	0.15	0.16	0.22	0.24	0.11	0.07	0.08	2.75
SALT LAKE CITY																
460920001 A01	26	0.04	0.05	0.08	0.10	0.14	0.18	0.20	0.25	0.27	0.37	0.61	0.20	0.14	0.16	2.01
VERMONT																
BURLINGTON																
470140001 A01	24	0.0	0.0	0.0	0.03	0.03	0.03	0.03	0.04	0.07	0.07	0.44	0.06	0.10	0.03	3.20
VIRGINIA																
DANVILLE																
480920001 A01	25	0.0	NO. OF SAMPLES (20) BELOW MIN. DET. EXCEEDS 50%									0.07				
HAMPTON																
481440001 A01	25	0.0	0.06	0.14	0.20	0.28	0.32	0.35	0.41	0.45	0.58	2.30	0.38	0.43	0.24	3.18
LYNCHBURG																
481840001 A01	26	0.05	0.08	0.09	0.09	0.11	0.11	0.14	0.16	0.17	0.23	0.33	0.14	0.06	0.13	1.54
NORFOLK																
482140001 A01	26	0.0	NO. OF SAMPLES (16) BELOW MIN. DET. EXCEEDS 50%									0.07				
PORTSMOUTH																
482440001 A01	26	0.0	0.04	0.08	0.08	0.12	0.12	0.17	0.20	0.23	0.33	0.67	0.17	0.14	0.12	2.59
RICHMOND																
482660001 A01	26	0.0	NO. OF SAMPLES (16) BELOW MIN. DET. EXCEEDS 50%									0.13				
ROANOKE																
482700001 A01	25	0.0	0.0	0.04	0.05	0.05	0.06	0.07	0.10	0.13	0.18	0.23	0.08	0.06	0.05	2.87
WASHINGTON																
SEATTLE																
491840001 A01	26	0.0	NO. OF SAMPLES (14) BELOW MIN. DET. EXCEEDS 50%									0.07				
WEST VIRGINIA																
CHARLESTON																
500280001 A01	26	0.0	NO. OF SAMPLES (17) BELOW MIN. DET. EXCEEDS 50%									0.19				
WISCONSIN																
EAU CLAIRE																
510840001 A01	24	0.0	0.0	0.03	0.03	0.04	0.05	0.06	0.07	0.09	0.11	0.18	0.06	0.05	0.04	2.68

Table 7-1 (continued). COPPER, URBAN FREQUENCY DISTRIBUTIONS, 1968

($\mu g/m^3$)

LOCATION	NO. SAMP.	MIN.	FREQUENCY DISTRIBUTION, %									MAX.	ARITHMETIC		GEOMETRIC	
			10	20	30	40	50	60	70	80	90		MEAN	STD. DEV.	MEAN	STD. DEV.
WISCONSIN																
KENOSHA																
511540001 A01	25	0.0	0.03	0.04	0.05	0.06	0.06	0.08	0.09	0.12	0.18	0.27	0.09	0.07	0.07	2.28
MADISON																
511860001 A01	25	0.0	0.02	0.03	0.03	0.04	0.05	0.05	0.07	0.07	0.08	0.14	0.05	0.03	0.04	2.17
MILWAUKEE																
512200001 A01	25	0.0	0.03	0.12	0.18	0.21	0.24	0.24	0.35	0.42	0.59	0.69	0.28	0.20	0.19	3.07
SUPERIOR																
513480001 A01	23	0.0	NO. OF SAMPLES : 14% BELOW MIN. DET. EXCEEDS 50%									0.08				
WYOMING																
CASPER																
570120001 A01	26	0.0	0.0	0.0	0.0	0.0	0.04	0.05	0.06	0.07	0.11	0.22				
CHEYENNE																
570140001 A01	26	0.0	0.0	0.0	0.03	0.04	0.04	0.05	0.09	0.09	0.13	0.23	0.06	0.05	0.04	3.34

Table 7-2. COPPER, NONURBAN FREQUENCY DISTRIBUTIONS, 1968

($\mu g/m^3$)

LOCATION	NO. SAMP.	MIN.	FREQUENCY DISTRIBUTION, %									MAX.	ARITHMETIC		GEOMETRIC	
			10	20	30	40	50	60	70	80	90		MEAN	STD. DEV.	MEAN	STD. DEV.
ARIZONA																
GRAND CANYON NAT PI																
030370001 A03	25	0.0	NO. OF SAMPLES (15) BELOW MIN. DET. EXCEEDS 50%									0.100				
ARKANSAS																
MONTGOMERY CO																
041760001 A03	25	0.0	NO. OF SAMPLES (15) BELOW MIN. DET. EXCEEDS 50%									0.072				
CALIFORNIA																
HUMBOLDT CO																
053300001 A03	26	0.0	0.086	0.140	0.1	0.220	0.240	0.280	0.320	0.360	0.410	0.480	0.248	0.12	0.190	3.02
COLORADO																
MESA VERDE NAT PARK																
061530002 A03	21	0.0	NO. OF SAMPLES (20) BELOW MIN. DET. EXCEEDS 50%									0.032				
DELAWARE																
KENT CO																
080060001 A03	24	0.0	NO. OF SAMPLES (23) BELOW MIN. DET. EXCEEDS 50%									0.027				
IDAHO																
BUTTE CO																
130940001 A03	24	0.0	NO. OF SAMPLES (21) BELOW MIN. DET. EXCEEDS 50%									0.220				
INDIANA																
MONROE CO																
152800001 A03	24	0.0	NO. OF SAMPLES (22) BELOW MIN. DET. EXCEEDS 50%									0.078				
PARKE CO																
153260001 A03	25	0.0	NO. OF SAMPLES (14) BELOW MIN. DET. EXCEEDS 50%									0.120				
MAINE																
ACADIA NAT PARK																
200010001 A03	26	0.0	NO. OF SAMPLES (23) BELOW MIN. DET. EXCEEDS 50%									0.130				
MARYLAND																
CALVERT CO																
210280001 A03	23	0.0	NO. OF SAMPLES (12) BELOW MIN. DET. EXCEEDS 50%									0.290				
MISSISSIPPI																
JACKSON CO																
251280001 A03	24	0.0	0.044	0.061	0.096	0.097	0.110	0.120	0.140	0.160	0.160	0.260	0.110	0.06	0.077	3.61
MISSOURI																
SHANNON CO																
264480001 A03	25	0.0	NO. OF SAMPLES (14) BELOW MIN. DET. EXCEEDS 50%									0.120				
MONTANA																
GLACIER NAT PARK																
270570001 A03	25	0.0	0.0	0.063	0.130	0.170	0.190	0.200	0.260	0.320	0.400	1.400	0.244	0.28	0.115	5.91
NEBRASKA																
THOMAS CO																
282480001 A03	24	0.0	0.027	0.033	0.040	0.045	0.046	0.049	0.056	0.063	0.072	0.120	0.049	0.02	0.037	2.85
NEVADA																
WHITE PINE CO																
290560001 A03	26	0.0	0.0	0.0	0.0	0.030	0.038	0.047	0.075	0.082	0.210	0.350				
NEW HAMPSHIRE																
COOS CO																
300140001 A03	23	0.0	0.0	0.0	0.0	0.0	0.039	0.059	0.062	0.130	0.260	1.800				
NEW YORK																
JEFFERSON CO																
333360001 A03	26	0.0	0.0	0.045	0.099	0.150	0.180	0.220	0.270	0.310	0.470	0.500	0.204	0.16	0.092	6.80
NORTH CAROLINA																
CAPE HATTERAS NAT																
340590001 A03	25	0.0	0.0	0.0	0.027	0.031	0.040	0.047	0.051	0.066	0.083	0.200	0.045	0.04	0.022	4.93
OKLAHOMA																
CHEROKEE CO																
370480001 A03	25	0.0	0.0	0.0	0.0	0.0	0.033	0.038	0.047	0.049	0.076	0.230				
OREGON																
CURRY CO																
380440001 A03	26	0.0	0.0	0.0	0.0	0.0	0.022	0.032	0.039	0.042	0.053	0.076				
PENNSYLVANIA																
CLARION CO																
391760001 A03	26	0.0	0.0	0.0	0.0	0.0	0.032	0.040	0.047	0.061	0.073	0.100				
RHODE ISLAND																
WASHINGTON CO																
410380001 A03	26	0.0	0.0	0.0	0.0	0.025	0.032	0.045	0.064	0.095	0.170	0.380				
SOUTH CAROLINA																
RICHLAND CO																
421900001 A03	23	0.0	NO. OF SAMPLES (20) BELOW MIN. DET. EXCEEDS 50%									0.068				
SOUTH DAKOTA																
BLACK HILLS NAT FO																
430110001 A03	26	0.055	0.092	0.160	0.170	0.210	0.220	0.260	0.280	0.300	0.380	0.450	0.233	0.10	0.209	1.66

Table 7-2 (continued). COPPER, NONURBAN FREQUENCY DISTRIBUTIONS, 1968

(ug/m^3)

LOCATION	NO. SAMP.	MIN.	FREQUENCY DISTRIBUTION, %									MAX.	ARITHMETIC		GEOMETRIC	
			10	20	30	40	50	60	70	80	90		MEAN	STD. DEV.	MEAN	STD. DEV.
TEXAS																
MATAGORDA CO																
453530001 A03	25	0.0	0.037	0.052	0.070	0.080	0.090	0.150	0.170	0.180	0.320	1.600	0.188	0.31	0.089	4.39
VERMONT																
ORANGE CO																
470360001 A03	26	0.0	0.0	0.0	0.0	0.0	0.027	0.037	0.041	0.052	0.070	0.160				
VIRGINIA																
SHENANDOAH NAT PAR																
482890001 A03	26	0.042	0.110	0.150	0.180	0.210	0.260	0.400	0.510	0.570	0.770	1.800	0.390	0.36	0.281	2.32
WYOMING																
YELLOWSTONE NAT PA																
520860001 A03	26	0.0	NO. OF SAMPLES (24) BELOW MIN. DET. EXCEEDS 50%									0.066				

Table 7-3. COPPER, URBAN QUARTERLY COMPOSITES AND YEARLY AVERAGES, 1969

($\mu g/m^3$)

LOCATION	1ST QTR.	2ND QTR.	3RD QTR.	4TH QTR.	YR. AVG.
ALABAMA					
BIRMINGHAM					
010120001 A01	0.07	0.03	0.02	0.02	0.03
HUNTSVILLE					
010430001 A01	0.10	0.08	0.04	0.07	0.07
MOBILE					
010940001 A01	0.11	0.13	0.13	0.17	0.13
MONTGOMERY					
010460001 A01	0.02	0.04	0.04	0.04	0.04
ALASKA					
ANCHORAGE					
020140001 A01	0.04	0.06	0.05	0.03	0.05
FAIRBANKS					
020240001 A01	0.04	0.04	0.02	0.02	0.03
ARIZONA					
MARICOPA CO.					
040130001 A01	0.03	0.03	0.03	0.04	0.03
PHOENIX					
040190001 A01	0.16	0.32	0.11	0.17	0.19
TUCSON					
040190001 A01	0.77	0.52	0.69	0.43	0.60
ARKANSAS					
LITTLE ROCK					
050440001 A01	0.04	0.03	0.02	0.04	0.04
PINE BLUFF					
050490001 A01	0.1	0.02	0.04	0.05	0.03
WEST MEMPHIS					
050740001 A01	0.05	0.07	0.03	0.03	0.04
CALIFORNIA					
ANAHEIM					
060300001 A01	0.04	0.07	0.17	0.06	0.07
AZUSA					
060370001 A01	0.05	0.04	0.04	0.05	0.04
BAKERSFIELD					
060290001 A01	0.04	0.03	0.03	0.05	0.03
BURBANK					
060370001 A01	0.03	0.04	0.03	0.04	0.04
LONG BEACH					
060370001 A01	0.04	0.04	0.04	0.04	0.04
LOS ANGELES					
060370001 A01	0.09	0.10	0.13	0.13	0.11
OAKLAND					
060010001 A01	0.14	0.11	0.12	0.08	0.11
RIVERSIDE					
060330001 A01	0.14	0.21	0.21	0.14	0.17
SACRAMENTO					
060670001 A01	0.14	0.07	0.06	0.06	0.08
SAN BERNARDINO					
060710001 A01	0.04	0.04	0.04	0.17	0.08
SAN FRANCISCO					
060750001 A01	0.07	0.07	0.08	0.08	0.07
SAN DIEGO					
060990001 A01	0.05	0.04	0.10	0.22	0.10
SAN FRANCISCO					
060750001 A01	0.03	0.04	0.04	0.07	0.04
SAN JOSE					
060850001 A01	0.03	0.04	0.04	0.04	0.04
SANTA ANA					
060590001 A01	0.08	0.09	0.07	0.06	0.08
TORRANCE					
060370001 A01	0.04	0.04	0.04	0.04	0.04
COLORADO					
DENVER					
080310001 A01	0.05	0.12	0.10	0.10	0.09

LOCATION	1ST QTR.	2ND QTR.	3RD QTR.	4TH QTR.	YR. AVG.
COLORADO (CONT'D)					
WINTERPARK CO.					
080430002 A01	0.06	0.04	0.06	0.08	0.06
CONNECTICUT					
BRIDGEPORT					
090560001 A01	0.94	1.40	2.20	0.57	1.28
HARTFORD					
090630001 A01	0.55	0.89	0.03	0.83	0.58
NEW HAVEN					
090770001 A01	0.04	0.05	0.12	0.09	0.08
WATERBURY					
091240001 A01	0.14	0.11	0.11	0.09	0.11
DELAWARE					
WILMINGTON					
100030001 A01	0.15	0.08	0.19	0.11	0.13
DIST. COLUMBIA					
WASHINGTON					
110010001 A01	0.17	0.13	0.10	0.08	0.12
FLORIDA					
JACKSONVILLE					
120140001 A01	0.24	0.29	0.36	0.21	0.27
MIAMI					
120710001 A01	0.08	0.04	0.06	0.05	0.06
ST PETERSBURG					
120590001 A01	0.23	0.74	0.14	0.05	0.29
TAMPA					
120570001 A01	0.08	0.05	0.05	0.13	0.08
GEORGIA					
ATLANTA					
130210001 A01	0.01	0.02	0.01	0.04	0.01
COLUMBUS					
130290001 A01	0.19	0.21	0.15	0.20	0.19
SAVANNAH					
130510001 A01	0.07	0.20	0.16	0.30	0.19
HAWAII					
HONOLULU					
150190001 A01	0.07	0.05	0.30	0.09	0.12
IDAHO					
BOISE CITY					
160230001 A01	1.60	2.70	0.61	0.14	1.76
ILLINOIS					
CHICAGO					
170310001 A01	0.11	0.12	0.14	0.10	0.12
EAST ST LOUIS					
170130001 A01	0.10	0.11	0.10	0.09	0.10
JOLIET					
170430001 A01	0.09	0.26	0.15	0.14	0.17
NORTH CHICAGO					
170490001 A01	0.37	1.10	0.13	0.05	0.40
PEORIA					
170630001 A01	0.15	0.17	0.09	0.16	0.13
ROCKFORD					
170990001 A01	0.04	0.04	0.03	0.03	0.04
SPRINGFIELD					
171210001 A01	0.03	0.03	0.04	0.02	0.03
INDIANA					
EAST CHICAGO					
180180001 A01	0.24	0.28	0.34	0.20	0.27
EVANSVILLE					
180330001 A01	0.09	0.09	0.11	0.17	0.11
FORT WAYNE					
180390001 A01	0.13	0.11	0.11	0.16	0.13
GARY					
180890001 A01	0.10	0.04	0.06	0.08	0.07

Table 7-3 (continued). COPPER, URBAN QUARTERLY COMPOSITES AND YEARLY AVERAGES, 1969

($\mu g/m^3$)

LOCATION	1ST QTR.	2ND QTR.	3RD QTR.	4TH QTR.	YR. AVG.
INDIANA					
HAMMOND	0.07	[illegible]	[illegible]	0.15	0.11
INDIANAPOLIS	[illegible]	[illegible]	0.09	[illegible]	0.05
NEW ALBANY	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
SOUTH BEND	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
TERRE HAUTE	[illegible]	[illegible]	[illegible]	0.04	[illegible]
IOWA					
DAVENPORT	0.04	0.03	[illegible]	[illegible]	[illegible]
DES MOINES	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
DUBUQUE	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
KANSAS					
KANSAS CITY	[illegible]	[illegible]	0.40	[illegible]	0.36
TOPEKA	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
WICHITA	0.20	[illegible]	[illegible]	[illegible]	[illegible]
KENTUCKY					
ASHLAND	[illegible]	[illegible]	0.30	0.47	0.25
COVINGTON	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
LOUISVILLE	[illegible]	[illegible]	0.40	[illegible]	[illegible]
LOUISIANA					
BATON ROUGE	[illegible]	[illegible]	0.19	[illegible]	0.12
NEW ORLEANS	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
SHREVEPORT	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
MARYLAND					
BALTIMORE	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
MASSACHUSETTS					
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
FALL RIVER	0.11	[illegible]	[illegible]	[illegible]	[illegible]
SPRINGFIELD	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
WORCESTER	[illegible]	[illegible]	[illegible]	0.04	[illegible]
MICHIGAN					
DEARBORN	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
DETROIT	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
FLINT	[illegible]	[illegible]	0.17	[illegible]	[illegible]
GRAND RAPIDS	[illegible]	[illegible]	0.15	0.15	[illegible]
LANSING	0.05	0.07	0.07	[illegible]	0.07
SAGINAW	[illegible]	[illegible]	0.02	[illegible]	[illegible]
MICHIGAN (CONT'D)					
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
MINNESOTA					
DULUTH	[illegible]	0.04	0.04	0.01	0.03
MINNEAPOLIS	[illegible]	[illegible]	[illegible]	[illegible]	0.05
ST PAUL	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
MISSOURI					
KANSAS CITY	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
ST LOUIS	[illegible]	[illegible]	0.40	[illegible]	[illegible]
MONTANA					
HELENA	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
NEBRASKA					
OMAHA	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
NEVADA					
LAS VEGAS	[illegible]	0.0	[illegible]	[illegible]	[illegible]
RENO	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
NEW HAMPSHIRE					
CONCORD	[illegible]	[illegible]	0.09	[illegible]	[illegible]
NEW JERSEY					
BURLINGTON CO	[illegible]	0.21	[illegible]	[illegible]	0.21
CAMDEN	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
GLASSBORO	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
HAMILTON	[illegible]	[illegible]	0.03	[illegible]	[illegible]
JERSEY CITY	0.14	[illegible]	[illegible]	[illegible]	[illegible]
NEWARK	0.09	[illegible]	[illegible]	[illegible]	[illegible]
PATERSON	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
PERTH AMBOY	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
TRENTON	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
NEW MEXICO					
ALBUQUERQUE	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
NEW YORK					
ALBANY	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
BUFFALO	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
NEW YORK CITY	[illegible]	[illegible]	[illegible]	0.18	[illegible]
NIAGARA FALLS	[illegible]	0.12	0.18	0.13	0.12
ROCHESTER	[illegible]	[illegible]	[illegible]	0.12	[illegible]
SYRACUSE	[illegible]	[illegible]	[illegible]	[illegible]	0.11

Table 7-3 (continued). COPPER, URBAN QUARTERLY COMPOSITES AND YEARLY AVERAGES, 1969

($\mu g/m^3$)

Location	1st Qtr.	2nd Qtr.	3rd Qtr.	4th Qtr.	Yr. Avg.
[illegible]					
[illegible]	0.09	0.14	0.17	0.23	0.16
[illegible]					
[illegible]	0.06	0.02	0.06	0.07	0.05
[illegible]					
[illegible]	0.04	0.07	0.09	0.06	0.06
[illegible]					
[illegible]	0.03	0.03	0.05	0.07	0.04
[illegible]					
[illegible]	0.03	0.04	0.10	0.06	0.07
[illegible]					
[illegible]	0.04	0.04	0.07	0.11	0.06
[illegible]					
[illegible]	0.04	0.04	0.05	0.04	0.04
[illegible]					
[illegible]	0.03	0.03	0.04	0.04	0.04
[illegible]					
[illegible]	0.20	0.22	0.23	0.17	0.20
[illegible]					
[illegible]	0.14	0.07	0.07	0.07	0.09
[illegible]					
[illegible]	0.47	0.51	0.46	0.31	0.44
[illegible]					
[illegible]	0.04	0.05	0.07	0.07	0.06
[illegible]					
[illegible]	0.47	0.38	0.59	0.52	0.48
[illegible]					
[illegible]	0.25	0.04	0.02	0.04	0.04
[illegible]					
[illegible]	0.02	0.02	0.03	0.02	0.02
[illegible]					
[illegible]	0.05	0.06	0.04	0.04	0.05
[illegible]					
[illegible]	0.40	0.06	0.05	0.09	0.15
[illegible]					
[illegible]	0.40	0.61	0.33	0.99	0.58
[illegible]					
[illegible]	0.28	0.25	0.16	0.14	0.21
[illegible]					
[illegible]	0.09	0.16	0.25	0.24	0.18
[illegible]					
[illegible]	0.06	0.08	0.03	0.02	0.05
[illegible]					
[illegible]	0.04	0.04	0.04	0.03	0.04
[illegible]					
[illegible]	0.12	0.13	0.09	0.10	0.11
[illegible]					
[illegible]	0.30	0.12	0.20	0.28	0.22
[illegible]					
[illegible]	0.04	0.03	0.02	0.03	0.03
[illegible]					
[illegible]	0.02	0.03	0.04	0.02	0.03
[illegible]					
[illegible]	0.42	0.30	0.14	0.19	0.26

Table 7-3 (continued). COPPER, URBAN QUARTERLY COMPOSITES AND YEARLY AVERAGES, 1969

($\mu g/m^3$)

LOCATION	1ST QTR.	2ND QTR.	3RD QTR.	4TH QTR.	YR. AVG.
VIRGINIA					
LYNCHBURG					
[illegible] A01	0.10	0.18	0.19	0.25	0.18
[illegible]					
[illegible] A01	0.06	0.08	0.17	0.15	0.12
[illegible]					
[illegible] A01	0.03	0.03	0.04	0.03	0.03
[illegible]					
[illegible] A01	0.24	0.07	0.17	0.08	0.14
[illegible]					
[illegible] A01	0.05	0.03	0.02	0.04	0.03
[illegible]					
[illegible] A01	0.05	0.09	0.09	0.14	0.08
WASHINGTON					
[illegible]					
[illegible] A01	0.05	0.03	0.03	0.11	0.06
[illegible]					
[illegible] A01	0.28	0.16	0.19	0.24	0.22
[illegible]					
[illegible] A01	0.06	0.12	0.14	0.11	0.11

LOCATION	1ST QTR.	2ND QTR.	3RD QTR.	4TH QTR.	YR. AVG.
WEST VIRGINIA					
CHARLESTON					
[illegible] A01	0.03	0.08	0.06	0.04	0.05
WISCONSIN					
EAU CLAIRE					
510840001 A01	0.13	0.05	0.04	0.06	0.07
KENOSHA					
511540001 A01	0.06	0.10	0.11	0.17	0.11
MADISON					
511960001 A01	0.05	0.04	0.06	0.04	0.05
MILWAUKEE					
512200001 A01	0.07	0.23	0.30	0.24	0.21
RACINE					
512880001 A01	0.14	0.14	0.04	0.03	0.09
TUPERIOR					
513480001 A01	0.04	0.05	0.03	0.02	0.03
WYOMING					
CHAMBER					
520120001 A01	0.05	0.22	0.18	0.07	0.13
CHEYENNE					
520140001 A01	0.11	0.09	0.21	0.17	0.14

Table 7-4. COPPER, NONURBAN QUARTERLY COMPOSITES AND YEARLY AVERAGES, 1969

($\mu g/m^3$)

LOCATION	1ST QTR.	2ND QTR.	3RD QTR.	4TH QTR.	YR. AVG.
ARIZONA					
GRAND CANYON NAT P					
030370001 A03	0.029	0.035	0.130	0.140	0.08[illegible]
ARKANSAS					
MONTGOMERY CO					
041760001 A03	0.120	0.100	0.085	0.070	0.094
CALIFORNIA					
HUMBOLDT CO					
053300001 A03	0.200	0.230	0.200	0.120	0.187
FLORIDA					
HARDEE CO					
101680001 A03	0.095	0.190	0.140	0.140	0.139
IDAHO					
BUTTE CO					
130340001 A03	0.011	0.015	0.0[illegible]	0.039	0.017
INDIANA					
MONROE CO					
152[illegible] A03	0.044	0.028	0.034	0.035	0.035
PARKE CO					
153260001 A03	0.014	0.800	0.410	0.074	0.329
MAINE					
ACADIA NAT PARK					
200010001 A03	0.055	0.031	0.032	0.031	0.037
MARYLAND					
CALVERT CO					
210280001 A03	0.230	0.048	0.[illegible]	0.[illegible]	0.088
MISSOURI					
SHANNON CO					
264480002 A03	0.067	0.057	0.088	0.056	0.067
MONTANA					
GLACIER NAT PARK					
270570001 A03	0.300	0.260	0.160	0.055	0.194
NEBRASKA					
THOMAS CO					
282440001 A03	0.053	0.043	0.050	0.026	0.043
NEVADA					
WHITE PINE CO					
290560001 A03	0.240	0.037	0.039	0.100	0.104
NEW HAMPSHIRE					
COOT CO					
300140001 A03	0.460	0.060	0.083	0.120	0.181
NEW YORK					
JEFFERSON CO					
333340001 A03	0.120	0.160	0.200	0.320	0.200

LOCATION	1ST QTR.	2ND QTR.	3RD QTR.	4TH QTR.	YR. AVG.
NORTH CAROLINA					
CAPE HATTERAS NAT					
340590001 A03	0.110	0.100	0.120	0.079	0.102
OKLAHOMA					
CHEROKEE CO					
370480001 A03	0.043	0.036	0.046	0.068	0.048
OREGON					
CURRY CO					
380440001 A03	0.046	0.035	0.027	0.045	0.038
PENNSYLVANIA					
CLARION CO					
391760001 A03	0.095	0.086	0.099	0.068	0.087
RHODE ISLAND					
WASHINGTON CO					
410380002 A03	0.059	0.120	0.063	0.100	0.085
SOUTH CAROLINA					
RICHLAND CO					
421900001 A03	0.050	0.077	0.067	0.046	0.060
SOUTH DAKOTA					
BLACK HILLS NAT FO					
430110001 A03	0.250	0.330	0.510	0.360	0.362
TENNESSEE					
CUMBERLAND CO					
440680001 A03	0.038	0.083	0.082	0.064	0.067
TEXAS					
MATAGORDA CO					
453530001 A03	0.052	0.130	0.190	0.270	0.160
VERMONT					
ORANGE CO					
470360001 A03	0.086	0.084	0.070	0.056	0.073
VIRGINIA					
SHENANDOAH NAT PAR					
482890001 A03	0.150	0.210	0.180	0.093	0.158
WYTHE CO					
483440001 A03	0.110	0.410	0.670	0.540	0.432
WISCONSIN					
DOOR CO					
510780001 A03	0.030	0.025	0.039	0.031	0.031
WYOMING					
YELLOWSTONE NAT PA					
520860001 A03	0.030	0.034	0.028	0.034	0.031

SECTION 8. URBAN AND NONURBAN METALS IN SUSPENDED PARTICULATES: IRON

Table 8-1. IRON, URBAN FREQUENCY DISTRIBUTIONS, 1968

($\mu g/m^3$)

LOCATION	NO. SAMP.	MIN.	FREQUENCY DISTRIBUTION, %									MAX.	ARITHMETIC		GEOMETRIC	
			10	20	30	40	50	60	70	80	90		MEAN	STD. DEV.	MEAN	STD. DEV.
ALABAMA																
GADSDEN																
011480001 A01	25	0.4	0.6	0.8	1.4	1.7	1.9	2.6	3.2	3.7	5.2	17.0	2.9	3.32	2.0	2.41
HUNTSVILLE																
011860001 A01	26	0.1	0.3	0.5	0.6	0.8	0.8	0.9	1.0	1.2	1.7	1.8	0.9	0.45	0.8	1.87
MOBILE																
012380001 A01	25	0.3	0.9	1.2	1.6	1.7	2.3	2.5	2.8	4.3	6.2	6.7	2.7	1.89	2.1	2.16
MONTGOMERY																
012460001 A01	26	0.0	0.5	0.7	0.8	0.9	1.2	1.4	1.7	1.8	3.2	3.4	1.4	0.89	1.1	2.47
ALASKA																
ANCHORAGE																
020040003 A01	26	0.0	0.0	0.3	0.6	1.3	1.5	1.9	2.6	3.3	4.5	7.3	2.0	1.92	1.0	4.53
FAIRBANKS																
020160001 A01	23	0.4	0.6	0.7	0.8	1.7	2.6	3.8	4.5	5.1	7.9	9.8	3.4	2.96	2.3	2.74
ARIZONA																
MARICOPA CO																
030440001 A01	25	0.3	0.3	0.3	0.5	0.7	0.8	0.9	1.2	1.3	1.6	1.8	0.9	0.48	0.7	1.84
PHOENIX																
030600002 A01	26	1.2	2.3	2.4	2.5	2.6	2.9	4.0	4.6	5.0	5.3	6.8	3.6	1.49	3.3	1.53
TUCSON																
030860001 A01	26	0.1	0.2	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.4	2.2	0.8	0.47	0.7	2.03
ARKANSAS																
LITTLE ROCK																
041440001 A01	25	0.0	0.3	0.4	0.5	0.7	0.8	0.9	1.1	1.2	2.6	3.4	1.1	0.88	0.8	2.42
TEXARKANA																
042560001 A01	25	0.3	0.5	0.7	0.8	0.8	1.1	1.1	1.3	1.4	2.5	3.9	1.3	0.91	1.0	1.91
WEST MEMPHIS																
042740001 A01	26	0.4	0.6	1.0	1.1	1.3	1.5	2.3	2.5	2.7	4.0	18.0	2.5	3.35	1.7	2.21
CALIFORNIA																
BURBANK																
050900001 A01	26	0.4	0.7	1.4	1.8	2.0	2.3	2.8	3.0	3.9	4.6	5.7	2.6	1.44	2.2	1.94
GLENDALE																
052940001 A01	25	0.5	0.6	0.9	1.2	1.2	1.4	1.9	2.2	2.4	2.8	4.1	1.7	0.89	1.5	1.73
LONG BEACH																
054100001 A01	26	0.5	0.8	0.9	1.4	1.5	1.8	2.4	3.3	3.7	4.6	5.6	2.3	1.45	1.9	1.99
LOS ANGELES																
054180001 A01	26	1.1	1.2	1.4	1.6	1.7	2.0	2.5	3.2	3.2	3.6	6.1	2.4	1.21	2.2	1.60
OAKLAND																
055300001 A01	25	0.7	1.2	1.3	1.6	1.8	2.0	2.0	2.7	3.9	4.7	9.5	2.6	1.93	2.2	1.87
ONTARIO																
055380001 A01	24	1.1	1.1	1.3	2.1	2.7	3.5	4.2	4.8	6.5	7.6	11.0	3.8	2.59	3.1	2.04
PASADENA																
055760001 A01	25	0.3	0.9	1.1	1.5	1.6	1.7	1.9	2.3	2.5	3.1	3.7	1.9	0.84	1.7	1.74
RIVERSIDE																
056400001 A01	26	0.7	1.2	1.4	1.7	2.2	2.4	3.8	4.3	4.6	5.3	6.4	3.1	1.71	2.6	1.87
SACRAMENTO																
056580001 A01	26	0.2	0.5	0.5	0.6	0.8	0.8	1.1	1.4	1.8	2.2	3.1	1.1	0.75	0.9	1.94
SAN BERNARDINO																
056680001 A01	26	0.4	0.7	1.3	1.8	2.2	2.3	2.6	3.6	4.5	4.9	5.5	2.7	1.56	2.2	2.01
SAN DIEGO																
056800001 A01	26	0.1	0.3	0.3	0.3	0.6	0.6	0.7	1.0	1.2	1.8	2.4	0.8	0.63	0.6	2.23
SAN FRANCISCO																
056860001 A01	26	0.0	0.3	0.6	0.7	0.8	0.9	1.1	1.4	1.7	1.9	2.4	1.1	0.63	0.8	2.41
COLORADO																
DENVER																
060580001 A01	24	0.5	1.0	1.2	1.8	2.1	2.4	2.8	3.2	3.9	5.1	6.7	2.7	1.59	2.3	1.89
CONNECTICUT																
HARTFORD																
070420001 A01	26	0.0	0.1	0.4	0.5	0.6	0.7	1.0	1.4	1.4	1.7	2.0	0.9	0.58	0.7	2.55
NEW HAVEN																
070700001 A01	26	0.0	0.3	0.5	0.6	0.9	1.0	1.1	1.3	1.4	1.7	2.4	1.0	0.57	0.8	2.24
DELAWARE																
NEWARK																
080160001 A01	24	0.2	1.1	1.1	1.4	1.5	1.6	1.8	1.9	2.1	2.3	4.5	1.7	0.92	1.5	1.88
WILMINGTON																
080260001 A01	23	0.0	0.8	1.0	1.1	1.5	1.7	2.0	2.4	3.2	4.0	8.7	2.2	1.80	1.6	2.65

Table 8-1 (continued). IRON, URBAN FREQUENCY DISTRIBUTIONS, 1968

($\mu g/m^3$)

LOCATION	NO. SAMP.	MIN.	FREQUENCY DISTRIBUTION, %									MAX.	ARITHMETIC		GEOMETRIC	
			10	20	30	40	50	60	70	80	90		MEAN	STD. DEV.	MEAN	STD. DEV.
DIST COLUMBIA																
WASHINGTON																
090020031 A01	26	0.3	0.4	0.6	0.8	0.8	0.9	1.1	1.6	1.8	2.5	4.8	1.3	1.031	1.0	2.05
FLORIDA																
JACKSONVILLE																
101960002 A01	25	0.0	0.2	0.3	0.5	0.6	0.8	0.9	1.3	1.4	1.8	2.0	0.9	0.601	0.6	2.70
FLORIDA																
TAMPA																
103460002 A01	23	0.2	0.7	0.9	1.0	1.1	1.2	1.5	1.8	2.6	2.8	5.8	1.7	1.231	1.3	2.11
GEORGIA																
ATLANTA																
110200001 A01	26	0.2	0.8	1.0	1.2	1.7	1.8	2.3	2.8	3.0	3.7	6.9	2.3	1.881	1.7	2.30
HAWAII																
HONOLULU																
123120001 A01	26	0.2	0.4	0.5	0.6	0.7	0.9	1.1	1.2	1.6	1.9	2.2	1.0	0.581	0.9	1.88
IDAHO																
BOISE CITY																
130220031 A01	26	0.2	0.3	0.4	0.5	0.8	0.9	1.1	1.5	1.7	4.2	4.5	1.3	1.241	0.9	2.49
ILLINOIS																
CHICAGO																
141270031 A01	25	0.9	1.6	1.9	2.1	2.4	2.9	3.5	4.9	5.8	8.6	16.0	4.3	3.191	3.4	1.96
EAST ST LOUIS																
142120001 A01	25	0.9	1.6	2.1	2.3	2.7	2.8	2.9	3.4	4.0	5.0	5.9	3.1	1.271	2.8	1.55
JOLIET																
143760001 A01	21	0.7	1.3	1.7	1.9	2.4	2.6	3.8	4.3	4.7	5.0	13.0	3.4	2.671	2.7	2.04
ROCKFORD																
146680001 A01	25	0.5	0.6	1.0	1.4	1.5	1.6	1.8	2.6	3.0	6.1	6.7	2.3	1.831	1.8	2.08
SPRINGFIELD																
147280001 A01	23	0.5	0.7	0.8	0.9	1.1	1.2	1.3	1.5	2.4	2.7	4.3	1.5	0.931	1.3	1.75
INDIANA																
EAST CHICAGO																
151180001 A01	26	0.6	3.2	4.4	5.4	6.1	7.1	7.6	8.5	9.2	12.0	27.0	8.1	5.981	6.5	2.05
HAMMOND																
151780001 A01	26	0.7	1.5	2.2	2.4	2.6	2.8	3.7	4.0	5.2	11.0	17.0	4.6	4.041	3.4	2.10
INDIANAPOLIS																
152040001 A01	25	0.9	1.5	1.8	2.2	2.3	3.1	3.5	3.6	3.7	4.1	4.8	2.9	1.071	2.7	1.55
SOUTH BEND																
153480001 A01	24	0.6	1.1	1.5	2.2	3.2	3.2	5.0	6.3	6.5	8.3	18.0	4.6	3.781	3.4	2.31
IOWA																
CEDAR RAPIDS																
160640001 A01	26	0.3	0.4	0.8	0.8	0.9	1.3	1.4	1.7	2.1	3.4	3.6	1.5	0.931	1.2	1.93
DES MOINES																
161180001 A01	26	0.6	0.8	1.2	1.5	1.6	1.9	2.3	2.9	3.9	7.5	8.9	2.8	2.281	2.1	2.04
DUBUQUE																
161260001 A01	23	0.7	0.9	1.1	1.2	1.8	2.3	2.7	2.8	4.4	5.3	7.1	2.7	1.851	2.1	2.01
KANSAS																
KANSAS CITY																
171830001 A01	25	0.5	0.6	0.8	1.0	1.8	2.0	2.1	2.7	2.8	3.5	4.2	2.0	1.091	1.7	1.88
TOPEKA																
173560001 A01	26	0.0	0.2	0.7	0.7	0.8	1.0	1.2	1.8	2.0	2.3	3.4	1.2	0.811	0.9	2.55
WICHITA																
175740001 A01	25	0.3	0.3	0.6	0.9	1.0	1.1	1.1	1.2	1.3	1.5	1.6	1.0	0.381	0.9	1.63
KENTUCKY																
ASHLAND																
180080002 A01	23	1.2	1.3	1.6	2.4	3.7	5.0	5.4	5.8	6.6	11.0	13.0	5.0	3.391	3.9	2.09
COVINGTON																
180800001 A01	25	1.0	1.3	1.4	2.2	2.5	3.3	3.8	5.0	6.3	8.8	13.0	4.3	3.211	3.3	2.11
LEXINGTON																
182300001 A01	24	0.1	0.3	0.7	1.0	1.1	1.2	1.4	1.9	2.6	2.6	3.2	1.5	0.881	1.2	2.24
LOUISVILLE																
182390001 A0	25	0.2	1.9	2.1	2.4	3.0	3.6	3.7	4.8	5.5	6.8	13.0	4.1	2.861	3.2	2.20
LOUISIANA																
NEW ORLEANS																
192020002 A01	25	0.4	0.7	0.8	1.0	1.2	1.5	1.7	1.8	2.2	2.6	7.5	1.7	1.381	1.4	1.86
MAINE																
PORTLAND																
200960002 A01	21	0.3	0.3	0.7	0.8	0.8	1.0	1.1	1.6	1.8	1.9	5.1	1.3	1.111	1.0	2.08
MARYLAND																
BALTIMORE																
210120001 A01	26	0.9	1.2	1.5	1.8	2.0	2.5	2.7	3.7	4.9	6.4	9.8	3.2	2.271	2.7	1.85

Table 8-1 (continued). IRON, URBAN FREQUENCY DISTRIBUTIONS, 1968

($\mu g/m^3$)

LOCATION	NO. SAMP.	MIN.	FREQUENCY DISTRIBUTION, %									MAX.	ARITHMETIC		GEOMETRIC	
			10	20	30	40	50	60	70	80	90		MEAN	STD. DEV.	MEAN	STD. DEV.
MASSACHUSETTS																
BOSTON																
220240001 A01	25	0.4	0.8	0.9	1.2	1.6	1.8	1.9	2.3	2.5	3.4	3.9	1.9	0.93	1.6	1.74
WORCHESTER																
222640001 A01	24	0.2	0.4	0.7	1.0	1.0	1.2	1.5	2.3	2.4	3.8	7.3	1.8	1.61	1.3	2.41
MICHIGAN																
DETROIT																
231180001 A01	26	1.0	1.5	2.1	2.8	5.2	5.7	6.8	7.2	9.0	15.0	22.0	6.6	5.17	4.8	2.32
FLINT																
231580001 A01	26	0.2	0.5	0.8	1.0	1.5	1.6	1.9	2.5	2.8	3.8	5.0	1.9	1.30	1.5	2.22
GRAND RAPIDS																
231820001 A01	26	0.3	0.5	0.8	1.0	1.4	1.8	2.2	2.2	2.5	4.0	4.6	1.9	1.22	1.6	2.10
TRENTON																
235120001 A01	25	0.6	1.1	1.2	1.6	1.6	2.0	2.4	4.9	5.4	6.7	12.0	3.3	2.76	2.4	2.17
MINNESOTA																
DULUTH																
241040301 A01	23	0.8	1.0	1.1	1.4	1.9	2.3	3.4	3.7	5.0	9.3	12.0	3.7	3.26	2.6	2.28
MINNEAPOLIS																
242760001 A01	26	0.6	0.7	1.0	1.1	1.7	2.1	2.4	3.0	4.4	5.1	9.7	2.7	2.37	2.0	2.15
MOORHEAD																
242320001 A01	26	0.0	0.4	0.5	0.8	0.9	1.1	1.2	1.4	1.7	2.9	7.4	1.4	1.43	1.0	2.54
ST PAUL																
249300001 A01	26	0.0	0.8	0.9	1.0	1.1	1.3	2.0	3.5	4.0	8.4	12.0	2.9	3.04	1.7	3.11
MISSISSIPPI																
JACKSON																
251260002 A01	26	0.0	0.5	0.8	0.9	1.1	1.3	1.3	1.6	1.7	3.3	7.9	1.6	1.55	1.1	2.56
MISSOURI																
KANSAS CITY																
262390001 A01	24	0.3	0.6	0.7	0.8	0.9	1.1	1.4	1.7	2.3	4.5	7.4	1.8	1.69	1.3	2.17
MONTANA																
HELENA																
270720001 A01	24	0.0	0.2	0.2	0.3	0.4	0.6	0.7	0.7	1.0	1.2	9.0	0.9	1.76	0.5	2.93
NEBRASKA																
OMAHA																
281880001 A01	25	0.4	0.6	0.8	0.9	1.2	1.5	1.8	2.1	4.5	7.1	12.0	2.7	2.93	1.7	2.49
NEVADA																
LAS VEGAS																
290320001 A01	24	0.4	0.5	0.6	1.0	1.1	1.3	1.4	1.5	2.3	2.7	3.3	1.4	0.79	1.2	1.82
RENO																
290480001 A01	25	0.7	0.9	0.9	1.0	1.0	2.1	2.8	3.1	4.9	7.2	15.0	3.1	3.32	2.1	2.42
NEW HAMPSHIRE																
CONCORD																
300120001 A01	25	0.0	0.0	0.0	0.1	0.3	0.5	0.5	0.7	1.2	1.8	5.2	0.8	1.08	0.4	3.87
NEW JERSEY																
BAYONNE																
310180001 A01	21	0.2	0.6	0.7	1.0	1.4	1.7	2.3	2.7	3.4	4.2	4.7	2.1	1.40	1.6	2.30
BURLINGTON CO																
310660002 A01	25	0.2	0.4	0.9	1.1	1.4	1.6	1.6	2.5	3.6	4.9	6.0	2.2	1.65	1.6	2.46
CAMDEN																
310720001 A01	26	1.3	1.6	2.1	2.6	2.9	3.0	3.1	4.3	4.8	6.6	7.7	3.5	1.70	3.1	1.60
GLASSBORO																
311700001 A01	25	0.1	0.4	0.6	0.7	1.0	1.3	1.4	2.0	2.2	3.4	4.0	1.5	1.03	1.1	2.25
HAMILTON																
311940001 A01	21	0.3	0.5	0.8	1.3	1.6	1.8	2.3	2.4	3.7	5.3	9.5	2.5	2.25	1.8	2.42
JERSEY CITY																
312320001 A01	25	0.3	0.7	1.2	1.3	1.5	1.7	1.9	2.1	2.7	3.8	5.4	2.0	1.19	1.6	1.92
NEWARK																
313480001 A01	24	0.0	0.4	0.8	1.3	1.4	1.8	1.9	2.1	2.9	3.4	4.9	1.9	1.22	1.4	2.71
PATERSON																
314140001 A01	25	0.0	0.2	0.3	0.6	0.8	1.0	1.1	1.3	1.5	2.8	3.4	1.2	0.92	0.8	2.97
PERTH AMBOY																
314220001 A01	26	0.4	0.7	1.0	1.3	1.7	2.2	2.8	3.0	3.3	5.0	11.0	2.7	2.38	2.0	2.20
TRENTON																
315400001 A01	24	0.3	0.6	1.0	1.4	1.7	1.9	2.0	2.2	2.5	3.3	5.4	2.0	1.13	1.7	1.86
NEW MEXICO																
ALBUQUERQUE																
320040001 A01	24	0.5	0.7	0.8	1.0	1.1	1.2	1.5	1.8	2.1	2.6	4.0	1.5	0.89	1.3	1.72

Table 8-1 (continued). IRON, URBAN FREQUENCY DISTRIBUTIONS, 1968

($\mu g/m^3$)

LOCATION	NO. SAMP.	MIN.	FREQUENCY DISTRIBUTION, %									MAX.	ARITHMETIC		GEOMETRIC	
			10	20	30	40	50	60	70	80	90		MEAN	STD. DEV.	MEAN	STD. DEV.
NORTH CAROLINA																
CHARLOTTE																
340700001 A01	25	1.0	1.1	1.2	2.3	2.4	2.6	3.0	3.5	4.6	7.4	18.0	3.7	3.31	2.8	2.06
DURHAM																
341160001 A01	23	0.8	1.5	2.4	2.7	3.3	4.0	4.5	4.6	5.4	7.3	13.0	4.3	2.75	3.6	1.89
NORTH DAKOTA																
BISMARCK																
350100001 A01	25	0.3	0.7	0.9	1.1	1.2	1.3	1.4	1.7	1.8	3.9	5.6	1.7	1.24	1.4	1.94
OHIO																
AKRON																
360060001 A01	25	0.3	1.5	2.6	3.7	3.9	5.6	6.2	7.1	8.3	10.0	14.0	5.8	3.39	4.5	2.33
CINCINNATI																
361220001 A01	26	0.2	0.5	0.7	1.3	1.7	2.6	4.1	4.9	8.8	14.0	22.0	5.0	5.66	2.6	3.65
CLEVELAND																
361300001 A01	26	2.0	2.7	4.0	4.3	4.6	5.0	7.7	8.4	12.0	13.0	23.0	7.3	4.77	6.1	1.86
COLUMBUS																
361460001 A01	24	0.8	1.1	1.3	1.7	1.9	2.1	2.7	3.2	3.4	3.7	4.6	2.4	1.06	2.2	1.62
DAYTON																
361660001 A01	26	0.5	0.9	1.4	1.7	1.9	2.2	3.8	5.1	5.3	8.3	15.0	3.9	3.57	2.7	2.45
TOLEDO																
366600001 A01	23	0.8	0.8	0.9	1.6	1.8	2.4	2.4	2.7	3.0	3.6	4.6	2.2	1.09	2.0	1.73
YOUNGSTOWN																
367760001 A01	25	2.3	2.6	3.3	4.6	5.6	8.6	8.7	10.0	12.0	19.0	25.0	9.1	6.07	7.3	1.98
OKLAHOMA																
OKLAHOMA CITY																
372200001 A01	22	0.2	0.2	0.3	0.4	0.4	0.6	0.8	0.9	1.0	1.2	1.2	0.7	0.36	0.6	1.88
TULSA																
373000001 A01	24	0.0	0.1	0.2	0.3	0.4	0.4	0.5	0.5	0.7	1.2	1.7	0.5	0.40	0.4	2.41
OREGON																
MEDFORD																
381160001 A01	25	0.0	0.2	0.6	0.8	0.9	1.5	1.7	1.9	2.2	3.0	3.7	1.5	1.03	1.0	3.13
PORTLAND																
381460001 A01	26	0.0	0.3	0.5	0.9	1.1	1.4	1.6	2.0	2.8	3.5	9.1	1.8	1.82	1.2	2.91
PENNSYLVANIA																
ALLENTOWN																
390120001 A01	24	0.6	0.8	1.0	1.3	1.4	1.5	1.8	2.8	3.1	4.2	9.7	2.3	1.96	1.8	1.98
ALTOONA																
390140001 A01	23	0.8	1.0	1.0	1.3	1.6	1.8	2.3	2.9	3.3	4.1	6.4	2.3	1.43	2.0	1.81
BETHLEHEM																
390780002 A01	24	0.7	1.1	1.4	2.0	2.1	2.2	2.9	3.6	7.9	14.0	24.0	5.2	6.67	3.0	2.70
HARRISBURG																
393880001 A01	26	0.6	0.9	1.1	1.3	1.4	1.7	2.0	2.4	3.1	6.1	11.0	2.5	2.34	1.9	2.02
HAZLETON																
393960001 A01	24	0.2	0.7	0.8	1.3	1.4	1.5	2.3	3.2	4.8	5.6	7.6	2.6	2.00	1.9	2.41
JOHNSTOWN																
394460001 A01	23	2.7	4.2	5.4	6.2	6.9	7.8	8.6	10.0	15.0	28.0	43.0	11.7	10.18	8.9	2.04
PHILADELPHIA																
397140001 A01	26	0.4	1.8	2.9	3.1	3.5	3.6	4.9	5.3	5.7	7.1	8.3	4.3	2.05	3.6	1.96
PITTSBURGH																
397260001 A01	26	3.9	4.1	4.4	4.7	7.3	7.6	9.1	9.9	15.0	19.0	22.0	9.5	5.53	8.1	1.75
READING																
397620001 A01	25	0.8	2.2	2.5	3.1	3.4	3.9	4.4	6.0	6.8	7.2	13.0	4.7	2.75	4.0	1.83
SCRANTON																
398040001 A01	25	1.4	1.7	2.3	3.3	4.3	5.6	7.5	8.1	8.5	16.0	21.0	7.0	5.26	5.4	2.14
WARMINSTER																
399160001 A01	25	0.2	0.9	1.0	1.3	1.6	1.7	2.4	3.4	6.0	6.6	7.3	2.9	2.28	2.1	2.43
WEST CHESTER																
399280001 A01	24	0.3	0.6	1.1	1.2	1.3	1.6	1.8	2.0	2.3	2.6	3.2	1.6	0.73	1.4	1.80
WILKES-BARRE																
399430001 A01	24	0.2	0.3	0.6	0.8	1.0	1.2	1.4	1.8	2.5	4.3	5.8	1.7	1.45	1.2	2.42
YORK																
399560001 A01	25	0.6	0.7	0.9	1.7	2.1	2.3	3.0	3.9	4.2	4.9	7.9	2.9	1.88	2.3	2.06
PUERTO RICO																
BAYAMON																
400380001 A01	25	0.1	0.5	0.6	1.0	1.2	1.4	1.7	2.2	2.3	2.9	3.3	1.6	0.90	1.3	2.17
CATANO																
400560001 A01	25	0.3	0.7	0.7	1.0	1.0	1.2	1.3	1.4	1.7	2.0	6.0	1.4	1.07	1.2	1.82

Table 8-1 (continued). IRON, URBAN FREQUENCY DISTRIBUTIONS, 1968

($\mu g/m^3$)

LOCATION	NO. SAMP.	MIN.	FREQUENCY DISTRIBUTION, %									MAX.	ARITHMETIC		GEOMETRIC	
			10	20	30	40	50	60	70	80	90		MEAN	STD. DEV.	MEAN	STD. DEV.
PUERTO RICO																
GUAYANILLA																
401080001 A01	25	0.0	0.1	0.1	0.2	0.3	0.5	0.5	0.7	0.8	1.1	1.3	0.5	0.38	0.4	2.60
PONCE																
401920001 A01	25	1.2	1.3	1.3	1.9	2.0	2.4	3.1	3.6	4.1	4.6	5.7	2.8	1.35	2.5	1.63
RHODE ISLAND																
EAST PROVIDENCE																
410120001 A01	26	0.3	0.3	0.4	0.8	0.9	0.9	1.1	1.4	1.4	2.3	2.7	1.1	0.66	0.9	1.97
PROVIDENCE																
410300001 A01	25	0.3	0.5	0.7	0.9	0.9	1.4	1.7	2.1	2.4	3.1	3.2	1.6	0.94	1.3	2.08
SOUTH CAROLINA																
COLUMBIA																
420760001 A01	24	0.0	0.2	0.4	0.6	0.8	1.2	1.3	2.2	2.3	3.4	6.6	1.6	1.49	1.0	3.18
GREENVILLE																
421180001 A01	25	0.2	0.7	0.7	0.9	1.1	1.1	1.3	1.6	2.2	4.7	11.0	2.0	2.45	1.3	2.36
SOUTH DAKOTA																
SIOUX FALLS																
431480001 A01	22	0.2	0.3	0.4	0.4	0.5	0.6	0.8	0.9	1.3	2.6	14.0	1.5	2.96	0.8	2.72
TENNESSEE																
CHATTANOOGA																
440380001 A01	25	0.7	1.5	1.7	2.5	2.6	3.2	4.2	5.3	5.6	7.7	11.0	4.0	2.50	3.3	1.98
KNOXVILLE																
441740001 A01	26	0.3	0.5	0.7	1.0	1.5	1.7	1.9	2.2	2.6	2.9	6.5	1.8	1.29	1.5	2.06
MEMPHIS																
442340001 A01	25	0.2	0.3	0.4	0.5	0.6	0.8	0.9	1.1	1.6	2.0	5.2	1.2	1.15	0.8	2.20
NASHVILLE																
442540001 A01	25	0.2	0.4	0.5	0.9	1.0	1.6	2.1	2.2	2.6	4.0	4.4	1.8	1.25	1.3	2.37
TEXAS																
DALLAS																
451310002 A01	26	0.3	0.3	0.6	0.8	1.0	1.1	1.2	1.4	1.5	1.7	4.5	1.2	0.81	1.0	1.88
HOUSTON																
452560001 A01	26	0.2	0.3	0.4	0.5	0.6	0.6	0.8	1.3	1.5	2.5	5.3	1.1	1.11	0.8	2.30
PASADENA																
454060001 A01	26	0.0	0.2	0.3	0.4	0.5	0.6	0.9	0.9	1.7	2.2	5.9	1.0	1.20	0.6	2.76
SAN ANTONIO																
454570001 A01	25	0.0	0.1	0.2	0.3	0.4	0.5	0.5	0.5	0.5	1.0	2.8	0.6	0.63	0.4	2.59
UTAH																
OGDEN																
460680001 A01	25	0.0	0.2	0.5	0.6	0.8	0.8	0.9	1.1	1.3	1.3	3.9	1.0	0.85	0.7	2.44
SALT LAKE CITY																
460920001 A01	26	0.3	0.5	0.5	0.6	1.0	1.1	1.2	1.4	2.0	4.4	7.0	1.7	1.67	1.2	2.27
VERMONT																
BURLINGTON																
470140001 A01	24	0.0	0.3	0.3	0.4	0.5	0.7	0.8	0.8	1.0	1.2	1.3	0.7	0.36	0.5	2.35
VIRGINIA																
DANVILLE																
480920001 A01	25	0.3	0.4	0.5	0.6	0.8	1.4	1.5	2.0	2.8	4.4	11.0	2.1	2.52	1.3	2.66
HAMPTON																
481440001 A01	25	0.0	0.4	0.5	0.8	0.9	1.1	1.1	1.4	1.8	2.5	6.3	1.4	1.27	0.9	2.70
LYNCHBURG																
481840001 A01	26	0.7	1.1	1.2	1.3	1.7	2.5	4.2	4.6	5.1	7.2	9.2	3.3	2.41	2.6	2.16
NORFOLK																
482140001 A01	26	0.2	0.4	0.5	0.7	1.0	1.4	1.5	1.9	2.4	3.2	5.4	1.6	1.23	1.2	2.26
PORTSMOUTH																
482440001 A01	26	0.4	0.6	1.1	1.3	1.5	1.7	1.9	2.0	2.4	3.3	6.8	2.0	1.56	1.6	1.98
RICHMOND																
482660001 A01	26	0.3	0.3	0.5	0.7	0.8	0.9	1.2	1.3	1.8	2.2	2.5	1.1	0.67	0.9	1.95
ROANOKE																
482700001 A01	25	0.0	0.3	0.8	1.0	1.4	2.0	2.0	2.8	3.0	4.3	6.2	2.1	1.55	1.5	2.94
WASHINGTON																
SEATTLE																
491840001 A01	26	0.0	0.3	0.4	0.5	0.7	0.8	0.9	1.5	2.0	2.2	3.1	1.1	0.81	0.8	2.61
WEST VIRGINIA																
CHARLESTON																
500280001 A01	26	0.0	1.3	1.6	1.6	2.3	2.8	3.6	4.5	5.4	8.2	15.0	3.9	3.26	2.6	2.95
WISCONSIN																
EAU CLAIRE																
510840001 A01	24	0.0	0.2	0.3	0.4	0.4	0.6	0.8	0.9	1.2	1.4	1.7	0.7	0.46	0.5	2.31

Table 8-1 (continued). IRON, URBAN FREQUENCY DISTRIBUTIONS, 1968

($\mu g/m^3$)

LOCATION	NO. SAMP.	MIN.	FREQUENCY DISTRIBUTION, %									MAX.	ARITHMETIC		GEOMETRIC	
			10	20	30	40	50	60	70	80	90		MEAN	STD. DEV.	MEAN	STD. DEV.
WISCONSIN																
KENOSHA																
511540001 A01	25	0.2	0.4	0.4	0.7	1.0	1.1	1.2	1.5	1.9	2.7	5.3	1.4	1.21	1.0	2.28
MADISON																
511860001 A01	25	0.2	0.4	0.5	0.6	0.7	0.9	1.0	1.2	1.5	1.9	5.2	1.1	0.99	0.9	2.00
MILWAUKEE																
512200001 A01	25	0.6	0.7	1.0	1.9	2.0	2.5	3.2	4.3	5.9	7.1	8.6	3.3	2.38	2.5	2.28
SUPERIOR																
513480001 A01	23	0.2	0.9	1.1	1.2	1.4	1.6	2.1	2.7	4.3	4.9	5.9	2.3	1.63	1.8	2.17
WYOMING																
CASPER																
520120001 A01	26	0.0	0.2	0.2	0.3	0.4	0.4	0.7	0.9	1.1	1.3	3.6	0.7	0.71	0.5	2.56
CHEYENNE																
520140001 A01	26	0.0	0.0	0.0	0.1	0.2	0.2	0.2	0.3	0.4	0.7	2.1				

Table 8-2. IRON, NONURBAN FREQUENCY DISTRIBUTIONS, 1968

($\mu g/m^3$)

LOCATION	NO. SAMP.	MIN.	FREQUENCY DISTRIBUTION, %									MAX.	ARITHMETIC		GEOMETRIC	
			10	20	30	40	50	60	70	80	90		MEAN	STD. DEV.	MEAN	STD. DEV.
ARIZONA																
GRAND CANYON NAT P																
030370001 A03	25	0.0	NO. OF SAMPLES <			21) BELOW MIN. DET. EXCEEDS 50%						1.10				
ARKANSAS																
MONTGOMERY CO																
041760001 A03	25	0.0	NO. OF SAMPLES <			21) BELOW MIN. DET. EXCEEDS 50%						0.60				
CALIFORNIA																
HUMBOLDT CO																
053300001 A03	26	0.0	NO. OF SAMPLES <			16) BELOW MIN. DET. EXCEEDS 50%						1.30				
COLORADO																
MESA VERDE NAT PAR																
061530002 A03	21	0.0	NO. OF SAMPLES <			17) BELOW MIN. DET. EXCEEDS 50%						0.54				
DELAWARE																
KENT CO																
080060001 A03	24	0.0	0.0	0.25	0.45	0.54	0.58	0.71	0.83	1.00	1.20	1.30	0.63	0.40	0.36	4.54
IDAHO																
BUTTE CO																
130340001 A03	24	0.0	NO. OF SAMPLES <			20) BELOW MIN. DET. EXCEEDS 50%						2.40				
INDIANA																
MONROE CO																
152800001 A03	24	0.0	0.0	0.17	0.27	0.36	0.48	0.54	0.58	0.75	1.00	1.10	0.47	0.31	0.30	3.60
PARKE CO																
153260001 A03	25	0.0	0.10	0.23	0.26	0.31	0.35	0.63	0.73	0.85	1.40	3.70	0.66	0.771	0.37	3.56
MAINE																
ACADIA NAT PARK																
230010001 A03	26	0.0	NO. OF SAMPLES <			16) BELOW MIN. DET. EXCEEDS 50%						0.61				
MARYLAND																
CALVERT CO																
210280001 A03	23	0.0	0.20	0.32	0.33	0.43	0.45	0.51	0.65	0.85	1.30	1.60	0.60	0.611	0.45	2.59
MISSISSIPPI																
JACKSON CO																
251280001 A03	24	0.0	NO. OF SAMPLES <			15) BELOW MIN. DET. EXCEEDS 50%						0.52				
MISSOURI																
SHANNON CO																
264490001 A03	25	0.0	0.0	0.0	0.0	0.0	0.13	0.19	0.23	0.27	0.30	0.50				
MONTANA																
GLACIER NAT PARK																
270570001 A03	25	0.0	NO. OF SAMPLES <			24) BELOW MIN. DET. EXCEEDS 50%						0.21				
NEBRASKA																
THOMAS CO																
282480001 A03	24	0.0	NO. OF SAMPLES <			12) BELOW MIN. DET. EXCEEDS 50%						0.76				
NEVADA																
WHITE PINE CO																
290560001 A03	26	0.0	NO. OF SAMPLES <			24) BELOW MIN. DET. EXCEEDS 50%						0.47				
NEW HAMPSHIRE																
COOS CO																
300140001 A03	23	0.0	NO. OF SAMPLES <			20) BELOW MIN. DET. EXCEEDS 50%						0.58				
NEW YORK																
JEFFERSON CO																
333340001 A03	26	0.0	NO. OF SAMPLES <			15) BELOW MIN. DET. EXCEEDS 50%						1.60				
NORTH CAROLINA																
CAPE HATTERAS NAT																
340590001 A03	25	0.0	NO. OF SAMPLES <			15) BELOW MIN. DET. EXCEEDS 50%						0.75				
OKLAHOMA																
CHEROKEE CO																
370490001 A03	25	0.0	NO. OF SAMPLES <			13) BELOW MIN. DET. EXCEEDS 50%						0.49				
OREGON																
CURRY CO																
380440001 A03	26	0.0	NO. OF SAMPLES <			18) BELOW MIN. DET. EXCEEDS 50%						0.80				
PENNSYLVANIA																
CLARION CO																
391760001 A03	26	0.0	0.0	0.0	0.22	0.52	0.60	1.00	1.30	1.40	1.70	2.80	0.81	0.74	0.33	8.37
RHODE ISLAND																
WASHINGTON CO																
410380001 A03	26	0.0	0.0	0.0	0.0	0.11	0.15	0.40	0.58	0.68	2.10	2.70				
SOUTH CAROLINA																
RICHLAND CO																
421900001 A03	23	0.0	NO. OF SAMPLES <			12) BELOW MIN. DET. EXCEEDS 50%						0.79				
SOUTH DAKOTA																
BLACK HILLS NAT FO																
430110001 A03	26	0.0	NO. OF SAMPLES <			26) BELOW MIN. DET. EXCEEDS 50%						0.0				

Table 8-2 (continued). IRON, NONURBAN FREQUENCY DISTRIBUTIONS, 1968

($\mu g/m^3$)

LOCATION	NO. SAMP.	MIN.	FREQUENCY DISTRIBUTION, %									MAX.	ARITHMETIC		GEOMETRIC	
			10	20	30	40	50	60	70	80	90		MEAN	STD. DEV.	MEAN	STD. DEV.
TEXAS																
MATAGORDA CO																
453530001 A03	25	0.0	NO. OF SAMPLES (25) BELOW MIN. DET. EXCEEDS 50%									0.0				
VERMONT																
ORANGE CO																
470360001 A03	26	0.0	0.0	0.0	0.0	0.0	0.14	0.19	0.33	0.57	0.89	0.92				
VIRGINIA																
SHENANDOAH NAT PAR																
482890001 A03	26	0.0	NO. OF SAMPLES (19) BELOW MIN. DET. EXCEEDS 50%									0.65				
WYOMING																
YELLOWSTONE NAT PA																
520860001 A03	26	0.0	NO. OF SAMPLES (25) BELOW MIN. DET. EXCEEDS 50%									0.84				

Table 8-3. IRON, URBAN QUARTERLY COMPOSITES AND YEARLY AVERAGES, 1969

($\mu g/m^3$)

LOCATION	1ST QTR.	2ND QTR.	3RD QTR.	4TH QTR.	YR. AVG.
ALABAMA					
HAUSDEN					
010480002 A01	1.5	1.9	0.7	1.4	1.4
HUNTSVILLE					
030460001 A01	1.3	0.8	0.6	0.8	0.8
MOBILE					
020680001 A01	1.9	1.4	2.7	3.5	2.7
MONTGOMERY					
010540001 A01	1.2	2.2	1.2	1.7	1.5
ALASKA					
ANCHORAGE					
020040001 A01	1.0	4.2	3.8	2.7	2.9
FAIRBANKS					
020150001 A01	0.8	4.3	0.1	7.1	3.3
ARIZONA					
MARICOPA CO					
030440001 A01	0.7	1.1	1.0	1.0	0.9
PHOENIX					
030400001 A01	1.6	3.1	2.4	3.4	2.6
TUCSON					
030860001 A01	0.3	1.0	1.0	1.4	1.0
ARKANSAS					
LITTLE ROCK					
040440001 A01	1.1	1.1	0.5	1.2	1.0
TEXARKANA					
040560001 A01	0.5	0.8	1.2	1.7	1.1
WEST MEMPHIS					
040740001 A01	1.5	1.3	1.3	1.6	1.5
CALIFORNIA					
ALAMEDA					
060010001 A01	1.4	1.5	1.7	2.0	1.8
ALHAMBRA					
060390001 A01	1.1	1.0	1.0	1.0	1.0
FRESNO					
060190001 A01	0.9	1.2	2.1	2.7	1.7
GLENDALE					
060430001 A01	1.5	1.3	1.4	1.6	1.2
LONG BEACH					
060370001 A01	1.4	1.4	1.4	2.1	1.6
LOS ANGELES					
060190001 A01	2.1	1.7	1.7	2.0	2.0
OAKLAND					
060010001 A01	1.7	1.8	1.8	2.5	1.9
ONTARIO					
060360001 A01	2.2	4.1	4.7	4.9	4.0
RIVERSIDE					
060400001 A01	2.4	2.4	3.2	3.3	2.9
SACRAMENTO					
060340001 A01	0.4	0.8	1.1	1.4	1.1
SAN [illegible]					
[illegible] A01	1.3	2.2	4.1	2.3	2.9
SAN DIEGO					
060430001 A01	1.3	1.1	1.8	1.5	1.4
SAN FRANCISCO					
060750001 A01	1.7	1.5	0.7	1.4	0.8
SAN JOSE					
060850001 A01	1.5	1.5	1.9	2.1	1.8
SANTA ANA					
060710001 A01	2.0	1.7	2.6	3.1	2.3
TORRANCE					
060260001 A01	1.6	1.1	0.7	1.8	1.3
COLORADO					
DENVER					
080580001 A01	2.6	1.7	2.4	5.3	3.0
MONTEZUMA CO					
061430002 A01	0.2	0.3	0.5	0.0	[illegible]
CONNECTICUT					
BRIDGEPORT					
070040001 A01	1.1	0.9	1.0	1.2	1.0
HARTFORD					
070470001 A01	1.4	1.8	1.1	1.0	1.3
NEW HAVEN					
070700001 A01	1.3	1.2	1.1	1.3	1.2
WATERBURY					
071240001 A01	1.5	1.5	1.0	3.9	1.2
DELAWARE					
WILMINGTON					
080140001 A01	1.6	1.3	2.8	1.4	2.0
DIST COLUMBIA					
WASHINGTON					
090070001 A01	1.6	1.3	1.5	1.0	1.4
FLORIDA					
JACKSONVILLE					
100760002 A01	1.2	0.8	1.0	0.5	0.9
MIAMI					
100700001 A01	0.4	0.4	0.7	0.7	0.6
ST PETERSBURG					
103780001 A01	0.5	0.7	0.5	0.3	0.3
TAMPA					
104360001 A01	1.0	0.9	1.7	1.0	1.0
GEORGIA					
ATLANTA					
110770001 A01	1.4	1.7	1.4	1.9	1.7
COLUMBUS					
111280001 A01	1.1	1.3	0.8	1.1	1.1
SAVANNAH					
114900001 A01	1.6	1.1	0.6	1.0	1.1
HAWAII					
HONOLULU					
170120001 A01	1.2	0.7	0.5	0.6	0.8
IDAHO					
BOISE CITY					
130220001 A01	1.1	1.4	2.5	1.9	1.7
ILLINOIS					
CHICAGO					
141770002 A01	5.4	4.1	2.7	3.5	4.0
EAST ST LOUIS					
142140001 A01	3.4	2.5	2.4	2.6	2.7
ELGIN					
144740001 A01	2.7	4.3	3.7	3.3	3.5
NORTH CHICAGO					
145620002 A01	1.1	3.4	2.6	0.7	2.5
PEORIA					
146080001 A01	3.1	4.9	4.0	3.1	3.8
ROCKFORD					
146690001 A01	2.2	3.3	2.2	1.9	2.4
SPRINGFIELD					
147280001 A01	1.6	2.3	2.2	1.7	1.8
INDIANA					
EAST CHICAGO					
151170001 A01	11.0	12.0	10.0	6.7	9.3
EVANSVILLE					
151330001 A01	2.7	2.0	2.2	2.1	2.2
FORT WAYNE					
151380001 A01	1.3	1.7	1.6	2.0	1.6
GARY					
151520001 A01	4.4	5.3	6.8	5.3	5.4

Table 8-3 (continued). IRON, URBAN QUARTERLY COMPOSITES AND YEARLY AVERAGES, 1969

($\mu g/m^3$)

LOCATION	1ST QTR.	2ND QTR.	3RD QTR.	4TH QTR.	YR. AVG.
[illegible]					
[illegible]					
[illegible]	4.7	7.4	5.0	4.1	5.3
[illegible]					
[illegible]	2.9	3.4	2.7	3.4	2.9
[illegible]					
[illegible]	1.7	2.0	2.0	2.1	2.1
[illegible]					
[illegible]	1.4	2.2	2.1	2.1	1.9
[illegible]					
[illegible]	2.7	4.7	5.3	7.8	5.1
[illegible]					
[illegible]					
[illegible]	4.7	2.9	3.0	3.7	3.1
[illegible]					
[illegible]	2.5	1.0	2.3	2.3	1.8
[illegible]					
[illegible]	7.2	5.4	3.1	3.9	4.0
[illegible]					
[illegible]					
[illegible]	2.0	2.9	2.8	3.7	2.3
[illegible]					
[illegible]	0.7	1.3	1.0	1.3	1.1
[illegible]					
[illegible]	0.6	1.1	1.1	1.4	1.0
[illegible]					
[illegible]	6.	4.4	4.7	7.2	6.2
[illegible]					
[illegible]	2.8	5.1	5.7	4.4	4.4
[illegible]					
[illegible]	2.4	3.7	2.4	2.0	2.5
[illegible]					
[illegible]					
[illegible]	0.6	1.1	0.9	0.4	0.7
[illegible]					
[illegible]	1.7	1.8	1.8	1.0	1.8
[illegible]					
[illegible]	2.5	2.4	1.7	2.2	2.7
[illegible]					
[illegible]					
[illegible]	2.8	3.4	2.5	2.3	2.1
[illegible]					
[illegible]					
[illegible]	1.1	1.4	1.3	1.4	1.2
[illegible]					
[illegible]	1.3	1.4	1.4	1.4	1.4
[illegible]					
[illegible]	1.6	1.1	1.3	1.3	1.1
[illegible]					
[illegible]	1.4	1.2	1.2	1.0	1.2
[illegible]					
[illegible]					
[illegible]	2.4	2.4	2.4	3.4	3.0
[illegible]					
[illegible]	2.3	2.4	2.3	3.4	1.8
[illegible]					
[illegible]	2.3	2.9	1.7	2.3	2.2
[illegible]					
[illegible]	1.4	2.8	1.7	1.3	1.8
[illegible]					
[illegible]	1.1	2.5	1.5	1.1	1.6
[illegible]					
[illegible]	1.8	1.8	1.7	1.3	1.6

LOCATION	1ST QTR.	2ND QTR.	3RD QTR.	4TH QTR.	YR. AVG.
[illegible]					
[illegible]					
[illegible]	2.6	3.0	2.3	3.1	2.7
[illegible]					
[illegible]					
[illegible]	1.6	3.4	3.6	1.4	2.5
[illegible]					
[illegible]	1.4	1.4	1.1	1.3	1.4
[illegible]					
[illegible]	1.4	1.3	1.1	1.	1.4
[illegible]					
[illegible]					
[illegible]	1.3	1.1	1.4	1.4	1.3
[illegible]					
[illegible]	2.7	1.4	1.1	1.1	1.7
[illegible]					
[illegible]					
[illegible]	1.6	1.7	1.3	1.2	1.3
[illegible]					
[illegible]					
[illegible]	1.8	1.3	1.8	1.2	1.1
[illegible]					
[illegible]					
[illegible]	1.0	0.9	1.7	1.3	1.1
[illegible]					
[illegible]	1.2	1.0	1.1	1.5	1.3
[illegible]					
[illegible]					
[illegible]	0.4	0.5	0.5	0.5	0.5
[illegible]					
[illegible]					
[illegible]	1.3	1.3	1.6	0.9	1.3
[illegible]					
[illegible]	1.6	1.7	1.8	1.1	1.4
[illegible]					
[illegible]	1.5	1.3	1.2	1.0	1.5
[illegible]					
[illegible]	1.6	1.8	1.6	3.0	2.1
[illegible]					
[illegible]	2.1	2.0	1.7	1.5	1.8
[illegible]					
[illegible]					
[illegible]	1.4	1.4	1.8	1.2	1.5
[illegible]					
[illegible]	1.4	0.7	1.4	1.4	1.4
[illegible]					
[illegible]	1.4	1.8	2.1	2.6	2.0
[illegible]					
[illegible]	1.6	1.6	2.4	1.5	2.0
[illegible]					
[illegible]					
[illegible]	1.1	1.4	1.3	2.3	1.5
[illegible]					
[illegible]					
[illegible]	1.0	1.6	1.7	1.5	1.4
[illegible]					
[illegible]	1.1	2.0	2.4	2.4	2.0
[illegible]					
[illegible]	4.3	2.3	1.7	1.9	2.4
[illegible]					
[illegible]	2.0	3.1	1.1	1.9	2.5
[illegible]					
[illegible]	2.3	1.4	3.7	2.4	2.4
[illegible]					
[illegible]	1.1	1.5	1.7	1.3	1.4

Table 8-3 (continued). IRON, URBAN QUARTERLY COMPOSITES AND YEARLY AVERAGES, 1969

($\mu g/m^3$)

LOCATION	1ST QTR.	2ND QTR.	3RD QTR.	4TH QTR.	YR. AVG.
NEW YORK					
UTICA					
336890001 A01	1.0	2.0	1.9	1.9	1.5
NORTH CAROLINA					
CHARLOTTE					
340290001 A01	3.0	1.6	1.7	2.9	2.3
DURHAM					
341160001 A01	1.9	2.1	1.5	1.7	1.8
GREENSBORO					
341740001 A01	3.0	1.6	1.9	2.6	2.3
WINSTON-SALEM					
344430001 A01	2.1	1.5	2.4	2.9	2.2
NORTH DAKOTA					
BISMARCK					
350100001 A01	0.6	1.9	1.5	1.5	1.4
OHIO					
AKRON					
360060001 A01	3.5	6.1	4.6	3.3	4.4
CANTON					
361000001 A01	3.2	3.9	4.3	2.6	3.5
CINCINNATI					
361270001 A01	3.0	5.0	6.0	2.8	4.2
CLEVELAND					
361300001 A01	3.2	9.1	6.3	3.6	5.5
COLUMBUS					
361440001 A01	2.2	3.3	2.7	2.2	2.6
DAYTON					
361660001 A01	1.4	2.7	1.7	2.0	1.9
TOLEDO					
366600001 A01	1.4	2.0	1.4	1.2	1.5
YOUNGSTOWN					
367740001 A01	8.6	7.1	8.9	4.5	7.3
OKLAHOMA					
OKLAHOMA CITY					
372300001 A01	0.4	0.5	1.0	0.9	0.7
TULSA					
372900001 A01	0.8	1.2	0.9	1.5	1.1
OREGON					
MEDFORD					
381160001 A01	1.1	1.5	1.8	2.0	1.6
PORTLAND					
381460001 A01	1.7	1.4	1.4	2.5	1.7
PENNSYLVANIA					
ALLENTOWN					
390120001 A01	1.8	1.7	1.4	1.7	1.6
BETHLEHEM					
390780001 A01	2.4	3.4	3.7	2.4	3.0
ERIE					
391360001 A01	2.4	2.5	3.4	0.7	2.3
HARRISBURG					
391880001 A01	1.7	2.0	1.8	0.9	1.4
HAZLETON					
391940001 A01	1.9	1.3	0.8	0.6	1.1
JOHNSTOWN					
392460001 A01	5.0	5.5	4.8	2.5	4.4
PHILADELPHIA					
397140001 A01	3.1	3.5	4.7	3.1	3.6
PITTSBURGH					
397360001 A01	10.0	7.7	9.2	3.7	7.6
READING					
397620001 A01	2.6	2.8	3.4	2.2	2.7
SCRANTON					
398040001 A01	5.5	5.7	3.5	2.9	4.4
WARMINSTER					
398160001 A01	1.1	1.7	1.3	0.8	1.1
398880001 (CONT)					
WEST CHESTER					
398980001 A01	2.1	1.6	1.5	1.5	1.7
WILKES-BARRE					
399420001 A01	2.4	2.0	1.8	1.2	1.8
YORK					
399560001 A01	1.5	1.9	1.4	2.7	1.9
PUERTO RICO					
BAYAMON					
400300001 A01	2.1	2.1	1.3	3.7	2.3
CATANO					
400560002 A01	1.7	1.8	2.1	3.0	2.1
GUAYANILLA					
401080001 A01	0.3	0.4	0.6	0.4	0.4
PONCE					
401920001 A01	0.9	1.0	1.7	1.6	1.3
SAN JUAN					
402160001 A01	1.3	1.3	1.3	1.2	1.3
RHODE ISLAND					
EAST PROVIDENCE					
410120001 A01	1.1	0.9	0.8	0.8	0.9
PROVIDENCE					
410300001 A01	0.9	0.8	1.0	0.9	0.9
SOUTH CAROLINA					
COLUMBIA					
420760001 A01	0.6	0.5	0.5	0.4	0.5
GREENVILLE					
421180001 A01	1.3	1.6	1.2	1.3	1.3
TENNESSEE					
CHATTANOOGA					
440380001 A01	1.9	2.6	1.7	2.0	2.0
KNOXVILLE					
441740001 A01	1.6	1.8	1.3	1.7	1.6
MEMPHIS					
442340001 A01	0.4	1.2	1.1	1.3	1.0
NASHVILLE					
442540001 A01	1.5	2.0	1.5	1.6	1.6
TEXAS					
DALLAS					
451310002 A01	0.7	0.8	1.3	2.0	1.2
EL PASO					
451700001 A01	3.1	3.6	2.3	3.8	3.2
FORT WORTH					
451880001 A01	1.2	1.3	1.1	1.3	1.2
HOUSTON					
452560001 A01	0.9	1.0	1.2	1.0	1.0
PASADENA					
456060001 A01	1.8	1.0	0.9	0.7	1.1
SAN ANTONIO					
454570001 A01	0.5	0.3	0.5	0.8	0.5
UTAH					
OGDEN					
460690001 A01	1.4	1.3	1.6	1.4	1.4
SALT LAKE CITY					
460970001 A01	1.5	0.8	1.4	2.5	1.6
VERMONT					
BURLINGTON					
470140001 A01	0.5	0.8	0.5	0.7	0.6
VIRGINIA					
DANVILLE					
490920001 A01	1.3	1.4	1.6	1.3	1.4
HAMPTON					
491440001 A01	0.9	0.7	1.1	0.8	0.9

Table 8-3 (continued). IRON, URBAN QUARTERLY COMPOSITES AND YEARLY AVERAGES, 1969

($\mu g/m^3$)

LOCATION	1ST QTR.	2ND QTR.	3RD QTR.	4TH QTR.	YR. AVG.
VIRGINIA					
LYNCHBURG					
47140001 A01	2.6	2.4	2.2	2.0	2.3
NEWPORT NEWS					
47120001 A01	1.2	1.0	1.2	1.2	1.3
NORFOLK					
47140001 A01	1.7	1.6	1.5	1.1	1.3
PORTSMOUTH					
47440001 A01	1.5	1.2	1.0	1.3	1.4
RICHMOND					
47760001 A01	1.2	1.4	1.5	1.3	1.4
ROANOKE					
48770001 A01	1.5	2.7	2.7	2.1	2.2
WASHINGTON					
SEATTLE					
49140001 A01	1.1	0.9	0.7	2.2	1.3
SPOKANE					
49260001 A01	1.7	1.3	3.7	1.5	1.8
TACOMA					
49210001 A01	1.1	1.2	1.0	1.3	1.3

LOCATION	1ST QTR.	2ND QTR.	3RD QTR.	4TH QTR.	YR. AVG.
WEST VIRGINIA					
CHARLESTON					
50028C001 A01	3.0	4.3	2.8	2.5	3.1
WISCONSIN					
EAU CLAIRE					
51090001 A01	1.3	1.1	0.9	0.6	1.0
KENOSHA					
51140001 A01	1.5	3.0	2.0	2.7	2.7
MADISON					
51180001 A01	1.1	1.2	1.0	0.7	1.0
MILWAUKEE					
51270001 A01	1.4	3.7	3.7	1.7	2.5
RACINE					
51280001 A01	1.3	1.2	1.4	1.3	1.3
SUPERIOR					
51340001 A01	1.9	2.2	2.0	2.4	2.1
WYOMING					
CASPER					
56010001 A01	0.2	1.2	1.2	1.0	0.9
CHEYENNE					
56020001 A01	0.2	0.1	0.6	0.5	0.4

Table 8-4. IRON, NONURBAN QUARTERLY COMPOSITES AND YEARLY AVERAGES, 1969

($\mu g/m^3$)

LOCATION	1ST QTR.	2ND QTR.	3RD QTR.	4TH QTR.	YR. AVG.
ARIZONA					
GRAND CANYON NAT PA					
030370001 A03	0.18	0.0	0.22	0.0	*****
ARKANSAS					
MONTGOMERY CO					
041760001 A03	0.30	0.41	0.45	0.19	0.34
CALIFORNIA					
HUMBOLDT CO					
253350001 A03	0.17	0.35	0.27	0.27	0.26
FLORIDA					
HARDEE CO					
101580001 A03	0.19	0.0	0.0	0.0	*****
IDAHO					
BUTTE CO					
130340001 A03	0.0	0.18	0.0	0.0	*****
INDIANA					
MONROE CO					
157800001 A03	0.67	0.70	0.66	0.92	0.74
PARKE CO					
157260001 A03	0.77	1.10	0.65	0.99	0.88
MAINE					
ACADIA NAT PARK					
200010001 A03	0.0	0.18	0.27	0.19	0.16
MARYLAND					
CALVERT CO					
210780001 A03	0.79	1.20	0.74	0.24	0.74
MISSOURI					
SHANNON CO					
264480001 A03	0.26	0.21	0.39	0.33	0.30
MONTANA					
GLACIER NAT PARK					
270570001 A03	0.0	0.0	0.34	0.0	*****
NEBRASKA					
THOMAS CO					
282480001 A03	0.0	0.32	0.47	0.19	0.25
NEVADA					
WHITE PINE CO					
290560001 A03	0.0	0.0	0.0	0.0	*****
NEW HAMPSHIRE					
COOS CO					
300140001 A03	0.0	0.19	0.0	0.0	*****
NEW YORK					
JEFFERSON CO					
333340001 A03	0.22	0.49	0.96	0.38	0.51

LOCATION	1ST QTR.	2ND QTR.	3RD QTR.	4TH QTR.	YR. AVG.
NORTH CAROLINA					
CAPE HATTERAS NAT					
340590001 A03	0.43	0.27	0.47	0.47	0.41
OKLAHOMA					
CHEROKEE CO					
370480001 A03	0.28	0.41	0.41	0.42	0.38
OREGON					
CURRY CO					
380440001 A03	0.26	0.0	0.0	0.66	*****
PENNSYLVANIA					
CLARION CO					
391760001 A03	1.10	1.30	1.10	0.76	1.06
RHODE ISLAND					
WASHINGTON CO					
410380002 A03	0.39	0.40	0.38	0.36	0.38
SOUTH CAROLINA					
RICHLAND CO					
421900001 A03	0.49	0.54	0.53	0.59	0.54
SOUTH DAKOTA					
BLACK HILLS NAT FO					
430110001 A03	0.0	0.0	0.0	0.0	*****
TENNESSEE					
CUMBERLAND CO					
440680001 A03	0.46	0.52	0.60	0.37	0.49
TEXAS					
MATAGORDA CO					
453530001 A03	0.30	0.36	0.49	0.43	0.39
VERMONT					
ORANGE CO					
470360001 A03	0.0	0.60	0.70	0.34	0.41
VIRGINIA					
SHENANDOAH NAT PAR					
482890001 A03	0.98	0.57	0.60	0.56	0.68
WYTHE CO					
483440001 A03	0.98	0.43	0.22	0.31	0.48
WISCONSIN					
DODGE CO					
510780001 A03	0.20	0.19	0.39	0.30	0.27
WYOMING					
YELLOWSTONE NAT PA					
520860001 A03	0.0	0.0	0.0	0.0	*****

SECTION 9. URBAN AND NONURBAN METALS IN SUSPENDED PARTICULATES: LEAD

Table 9-1. LEAD, URBAN FREQUENCY DISTRIBUTIONS, 1968

($\mu g/m^3$)

LOCATION	NO. SAMP.	MIN.	FREQUENCY DISTRIBUTION, %									MAX.	ARITHMETIC		GEOMETRIC	
			10	20	30	40	50	60	70	80	90		MEAN	STD. DEV.	MEAN	STD. DEV.
ALABAMA																
GADSDEN																
011480001 A01	25	0.08	0.23	0.24	0.40	0.50	0.57	0.79	0.98	0.94	1.70	8.20	1.02	1.58	0.61	2.60
HUNTSVILLE																
011960001 A01	26	0.09	0.23	0.31	0.35	0.45	0.53	0.65	0.82	0.84	1.30	1.50	0.63	0.37	0.52	1.96
MOBILE																
012980001 A01	25	0.31	0.36	0.43	0.59	0.64	0.86	0.96	1.40	1.70	2.00	3.10	1.10	0.76	0.89	1.95
MONTGOMERY																
012460001 A01	26	0.10	0.14	0.23	0.30	0.44	0.46	0.56	0.69	0.70	1.30	1.90	0.59	0.45	0.45	2.15
ALASKA																
ANCHORAGE																
020040003 A01	26	0.04	0.10	0.22	0.22	0.30	0.36	0.41	0.50	0.81	1.70	2.20	0.58	0.61	0.38	2.51
FAIRBANKS																
020160001 A01	23	0.01	0.86	1.10	1.30	1.50	1.70	2.00	2.60	3.40	3.90	4.70	2.13	1.18	1.83	1.78
ARIZONA																
MARICOPA CO																
030440001 A01	25	0.02	0.04	0.07	0.08	0.09	0.12	0.14	0.19	0.24	0.37	0.81	0.17	0.16	0.13	2.25
PHOENIX																
030600002 A01	26	0.23	0.95	0.88	0.98	1.20	1.40	2.00	3.10	4.10	6.40	6.90	2.34	2.01	1.59	2.58
TUCSON																
030860001 A01	26	0.08	0.15	0.26	0.25	0.34	0.36	0.45	0.56	0.58	0.75	0.79	0.42	0.21	0.36	1.79
ARKANSAS																
LITTLE ROCK																
041440001 A01	25	0.16	0.32	0.36	0.47	0.50	0.59	0.62	0.72	0.82	1.20	1.70	0.67	0.36	0.59	1.68
TEXARKANA																
042560001 A01	25	0.08	0.14	0.23	0.25	0.34	0.42	0.48	0.60	0.62	1.10	1.50	0.49	0.34	0.39	2.01
WEST MEMPHIS																
047740001 A01	26	0.15	0.17	0.27	0.32	0.38	0.44	0.68	0.94	0.99	1.40	7.80	0.90	1.47	0.55	2.42
CALIFORNIA																
BURBANK																
050900001 A01	26	0.36	1.10	1.40	1.90	2.40	2.50	3.20	6.20	7.10	11.00	14.00	4.42	3.85	3.10	2.43
GLENDALE																
052940001 A01	25	1.10	1.30	1.30	1.70	2.30	3.00	3.50	3.90	4.10	5.10	7.50	3.04	1.61	2.64	1.75
LONG BEACH																
054100001 A01	26	0.24	0.45	0.71	0.76	1.10	1.20	3.20	5.40	6.30	8.10	12.00	3.25	3.24	1.87	3.12
LOS ANGELES																
054180001 A01	26	0.68	1.10	1.40	1.90	2.00	2.50	3.50	3.80	4.80	5.40	10.00	3.32	2.42	2.64	2.01
OAKLAND																
055300001 A01	25	0.22	0.32	0.33	0.59	0.69	1.30	1.70	1.90	2.40	4.40	5.70	1.65	1.54	1.08	2.66
ONTARIO																
055380001 A01	24	0.15	0.36	0.52	0.90	1.10	1.30	1.70	1.70	2.30	2.30	4.30	1.44	0.93	1.13	2.19
PASADENA																
055740001 A01	25	0.91	1.50	1.60	2.10	2.80	3.40	4.00	4.40	4.90	6.40	8.30	3.54	1.88	3.05	1.79
RIVERSIDE																
056400001 A01	25	0.25	0.43	0.54	0.73	1.10	1.20	1.70	2.50	3.30	4.60	5.20	1.89	1.54	1.33	2.44
SACRAMENTO																
056540001 A01	25	0.20	0.24	0.36	0.41	0.49	0.65	0.74	1.20	1.40	4.20	6.30	1.24	1.50	0.76	2.58
SAN BERNARDINO																
056680001 A01	26	0.22	0.39	0.47	0.66	0.83	1.10	1.20	1.30	1.40	1.70	2.20	1.02	0.51	0.88	1.85
SAN DIEGO																
056960001 A01	26	0.11	0.23	0.30	0.39	0.47	0.66	1.50	2.00	2.50	6.80	7.70	1.75	2.18	0.90	3.30
SAN FRANCISCO																
056980001 A01	26	0.38	0.56	0.69	0.90	1.10	1.10	1.40	1.70	1.80	2.90	3.10	1.38	0.78	1.19	1.77
COLORADO																
DENVER																
060980001 A01	24	0.29	0.40	0.49	0.64	0.70	0.86	1.00	1.20	1.50	2.30	3.40	1.10	0.78	0.89	1.93
CONNECTICUT																
HARTFORD																
070420001 A01	26	0.13	0.18	0.28	0.32	0.47	0.50	0.54	0.64	0.81	1.20	2.60	0.61	0.50	0.48	1.98
NEW HAVEN																
070700001 A01	26	0.15	0.23	0.27	0.35	0.37	0.38	0.55	0.77	0.86	1.00	1.80	0.59	0.40	0.48	1.89
DELAWARE																
NEWARK																
080140001 A01	24	0.03	0.08	0.11	0.17	0.20	0.24	0.29	0.33	0.39	0.40	0.64	0.26	0.15	0.21	2.07
WILMINGTON																
080260001 A01	23	0.17	0.32	0.42	0.42	0.47	0.58	0.62	0.67	0.72	1.30	1.90	0.66	0.40	0.57	1.72

Table 9-1 (continued). LEAD, URBAN FREQUENCY DISTRIBUTIONS, 1968

($\mu g/m^3$)

LOCATION	NO. SAMP.	MIN.	FREQUENCY DISTRIBUTION, %									MAX.	ARITHMETIC		GEOMETRIC	
			10	20	30	40	50	60	70	80	90		MEAN	STD. DEV.	MEAN	STD. DEV.
DIST COLUMBIA																
WASHINGTON																
090120001 A01	26	0.27	0.29	0.35	0.42	0.55	0.60	0.73	0.85	0.97	1.30	1.70	0.70	0.39	0.61	1.73
FLORIDA																
JACKSONVILLE																
101960002 A01	25	0.14	0.23	0.46	0.64	0.67	0.72	0.48	0.98	1.30	2.10	2.60	0.93	0.631	0.73	2.13
FLORIDA																
TAMPA																
104760002 A01	23	0.12	0.22	0.25	0.32	0.44	0.61	0.84	1.10	1.70	2.00	3.60	0.95	0.871	0.64	2.53
GEORGIA																
ATLANTA																
110230001 A01	26	0.32	0.54	0.59	0.60	0.69	0.87	1.40	1.60	1.90	2.20	3.50	1.21	0.791	1.00	1.89
HAWAII																
HONOLULU																
120120001 A01	26	0.18	0.23	0.29	0.53	0.56	0.63	0.80	0.95	1.10	1.70	2.60	0.81	0.581	0.64	2.04
IDAHO																
BOISE CITY																
130220001 A01	26	0.10	0.18	0.27	0.31	0.33	0.42	0.56	0.79	0.95	1.30	2.10	0.60	0.471	0.46	2.11
ILLINOIS																
CHICAGO																
141220001 A01	25	0.44	0.76	0.82	1.30	1.30	1.40	1.40	1.80	2.10	3.00	3.40	1.60	0.851	1.40	1.70
EAST ST LOUIS																
142120001 A01	25	0.26	0.37	0.40	0.43	0.51	0.66	0.85	1.30	1.30	1.40	2.90	0.86	0.581	0.72	1.83
JOLIET																
143760001 A01	21	0.11	0.14	0.31	0.40	0.47	0.59	0.77	0.83	0.87	1.00	2.30	0.67	0.481	0.53	2.08
ROCKFORD																
146840001 A01	25	0.10	0.30	0.35	0.43	0.46	0.58	0.71	0.87	1.00	1.20	1.90	0.70	0.411	0.58	1.89
SPRINGFIELD																
147260001 A01	23	0.17	0.26	0.31	0.33	0.43	0.47	0.53	0.54	0.62	0.68	1.00	0.49	0.211	0.45	1.54
INDIANA																
EAST CHICAGO																
151180001 A01	24	0.32	0.48	0.57	0.73	0.95	1.10	1.20	1.40	1.50	1.80	3.10	1.14	0.631	0.99	1.74
HAMMOND																
151780001 A01	26	0.32	0.45	0.47	0.59	0.67	0.81	0.85	1.30	1.40	1.80	2.90	0.93	0.511	0.81	1.71
INDIANAPOLIS																
152040001 A01	25	0.26	0.71	0.81	1.30	1.10	1.10	1.20	1.30	1.40	1.90	5.60	1.37	1.021	1.15	1.74
SOUTH BEND																
153990001 A01	24	0.15	0.46	0.50	0.74	0.84	1.10	1.40	2.20	2.70	4.20	6.10	1.70	1.501	1.18	2.46
IOWA																
CEDAR RAPIDS																
160640001 A01	26	0.09	0.11	0.12	0.14	0.23	0.29	0.38	0.46	0.56	0.86	1.20	0.37	0.281	0.29	2.12
DES MOINES																
161180001 A01	26	0.13	0.20	0.41	0.44	0.50	0.59	0.64	0.73	0.84	1.20	1.60	0.65	0.341	0.57	1.71
DUBUQUE																
161740001 A01	23	0.03	0.17	0.26	0.31	0.40	0.41	0.46	0.55	0.94	1.10	2.00	0.58	0.461	0.43	2.36
KANSAS																
KANSAS CITY																
171800001 A01	25	0.16	0.22	0.29	0.43	0.52	0.59	0.69	0.75	0.94	1.40	1.90	0.72	0.471	0.58	1.94
TOPEKA																
173560001 A01	24	0.07	0.09	0.22	0.24	0.27	0.32	0.44	0.51	0.54	0.77	3.00	0.47	0.561	0.31	2.53
WICHITA																
173740001 A01	25	0.15	0.17	0.19	0.32	0.45	0.57	0.60	0.73	0.80	1.00	1.90	0.59	0.401	0.48	1.99
KENTUCKY																
ASHLAND																
180090002 A01	23	0.17	0.31	0.42	0.45	0.49	0.68	1.10	1.20	2.20	2.90	5.00	1.19	1.181	0.81	2.44
COVINGTON																
180830001 A01	25	0.14	0.42	0.57	0.65	0.71	0.83	0.89	1.20	1.50	2.10	3.00	1.04	0.671	0.87	1.89
LEXINGTON																
182300001 A01	24	0.08	0.23	0.31	0.43	0.49	0.51	0.55	0.57	0.95	1.40	1.60	0.64	0.421	0.52	2.00
LOUISVILLE																
182380001 A01	25	0.33	0.63	0.76	0.87	1.10	1.20	1.20	1.50	2.00	3.10	5.40	1.52	1.141	1.24	1.86
LOUISIANA																
NEW ORLEANS																
192020002 A01	25	0.56	0.74	0.82	1.10	1.30	1.50	1.70	1.90	1.90	3.10	3.70	1.65	0.841	1.46	1.67
MAINE																
PORTLAND																
200960002 A01	21	0.10	0.14	0.20	0.23	0.29	0.33	0.40	0.45	0.57	0.68	1.80	0.43	0.371	0.34	1.95
MARYLAND																
BALTIMORE																
210120001 A01	26	0.19	0.47	0.74	0.82	1.00	1.20	1.30	1.50	1.50	2.90	5.20	1.45	1.211	1.13	2.04

Table 9-1 (continued). LEAD, URBAN FREQUENCY DISTRIBUTIONS, 1968

($\mu g/m^3$)

LOCATION	NO. SAMP.	MIN.	FREQUENCY DISTRIBUTION, %									MAX.	ARITHMETIC		GEOMETRIC	
			10	20	30	40	50	60	70	80	90		MEAN	STD. DEV.	MEAN	STD. DEV.
MASSACHUSETTS																
BOSTON																
220240001 A01	25	0.23	0.36	0.60	0.67	0.78	0.89	0.96	1.00	1.10	1.40	1.50	0.84	0.35	0.80	1.62
WINCHESTER																
222640001 A01	24	0.13	0.27	0.42	0.49	0.50	0.60	0.69	0.74	0.93	1.30	1.50	0.68	0.36	0.60	1.72
MICHIGAN																
DETROIT																
261180001 A01	26	0.41	0.66	1.00	1.00	1.10	1.35	1.60	1.80	2.10	3.20	3.40	1.59	0.86	1.38	1.75
FLINT																
263580001 A01	26	0.10	0.18	0.21	0.22	0.34	0.38	0.51	0.62	0.67	0.83	3.00	0.50	0.40	0.40	1.99
GRAND RAPIDS																
261970001 A01	26	0.22	0.34	0.54	0.66	0.74	0.79	1.30	1.30	1.40	2.20	2.40	1.04	0.67	0.88	1.95
TRENTON																
235120001 A01	25	0.11	0.19	0.19	0.27	0.35	0.44	0.50	0.64	1.40	2.00	2.50	0.74	0.71	0.49	2.44
MINNESOTA																
DULUTH																
241040001 A01	23	0.08	0.27	0.40	0.42	0.44	0.66	0.91	0.92	1.00	1.00	2.40	0.75	0.54	0.59	2.09
MINNEAPOLIS																
242240001 A01	25	0.13	0.17	0.25	0.31	0.41	0.46	0.51	0.60	0.69	1.00	1.70	0.51	0.30	0.43	1.85
ROSEMEAD																
249370001 A01	26	0.05	0.09	0.10	0.18	0.25	0.29	0.30	0.47	0.69	0.86	1.30	0.35	0.27	0.27	2.11
ST PAUL																
249330001 A01	26	0.07	0.35	0.42	0.47	0.56	0.56	0.63	0.63	0.78	1.20	1.70	0.66	0.35	0.57	1.81
MISSISSIPPI																
JACKSON																
2512400002 A01	24	0.13	0.27	0.35	0.37	0.47	0.64	0.85	0.96	0.98	1.50	2.40	0.78	0.56	0.64	1.92
MISSOURI																
KANSAS CITY																
2631400001 A01	24	0.10	0.21	0.41	0.56	0.65	0.69	0.87	1.00	1.10	1.40	2.00	0.83	0.47	0.67	2.09
MONTANA																
HELENA																
270230001 A01	24	0.0	0.04	0.06	0.09	0.13	0.14	0.20	0.44	0.84	1.40	2.90	0.49	0.70	0.20	4.41
NEBRASKA																
OMAHA																
281480001 A01	25	0.16	0.41	0.45	0.58	0.78	0.93	1.30	1.40	1.50	3.40	10.00	1.62	2.24	0.99	2.57
NEVADA																
LAS VEGAS																
290420001 A01	24	0.22	0.23	0.44	0.53	0.69	0.80	0.93	1.10	1.90	2.30	4.40	1.17	1.15	0.84	2.24
RENO																
2904H0001 A01	25	0.24	0.38	0.44	0.53	0.63	0.75	0.95	1.30	1.60	2.50	3.70	1.13	0.92	0.87	2.08
NEW HAMPSHIRE																
CONCORD																
300120001 A01	25	0.03	0.09	0.10	0.11	0.16	0.27	0.29	0.38	0.45	0.69	1.96	0.35	0.39	0.23	2.65
NEW JERSEY																
BAYONNE																
3101A0001 A01	21	0.15	0.27	0.48	0.50	0.52	0.66	0.84	0.93	1.10	1.60	2.40	0.83	0.55	0.69	1.90
BURLINGTON CO																
3106A0002 A01	25	0.16	0.27	0.39	0.46	0.51	0.66	0.68	0.87	1.20	1.50	2.70	0.80	0.57	0.64	1.96
CAMDEN																
3107200G1 A01	26	0.21	0.49	0.64	0.65	0.75	0.93	1.30	1.40	1.50	1.90	2.30	1.09	0.55	0.95	1.75
GLASSBORO																
311700001 A01	25	0.10	0.17	0.22	0.25	0.27	0.36	0.47	0.47	0.56	0.63	0.69	0.39	0.181	0.35	1.68
HAMILTON																
311940001 A01	21	0.25	0.33	0.40	0.42	0.57	0.69	0.91	1.00	1.20	1.40	1.50	0.90	0.41	0.70	1.73
JERSEY CITY																
312320001 A01	25	0.13	0.35	0.45	0.59	0.61	0.72	0.85	1.10	1.10	2.00	3.60	1.01	0.83	0.78	2.04
NEWARK																
313480001 A01	24	0.11	0.43	0.46	0.43	0.91	0.97	1.10	1.50	2.00	2.50	3.00	1.21	0.77	0.96	2.15
PATERSON																
314140001 A01	25	0.04	0.21	0.39	0.54	0.67	0.75	0.95	1.00	1.20	2.20	2.60	0.90	0.441	0.67	2.46
PERTH AMBOY																
314220001 A01	24	0.15	0.31	0.36	0.38	0.47	0.51	0.57	0.62	0.96	1.20	1.50	0.63	0.351	0.55	1.71
TRENTON																
315400001 A01	24	0.09	0.14	0.18	0.30	0.35	0.33	0.54	0.58	0.59	0.67	0.86	0.42	0.211	0.36	1.96
NEW MEXICO																
ALBUQUERQUE																
320040001 A01	24	0.20	0.29	0.34	0.38	0.49	0.62	0.85	1.00	1.30	1.90	2.30	0.95	0.611	0.87	2.04

Table 9-1 (continued). LEAD, URBAN FREQUENCY DISTRIBUTIONS, 1968

($\mu g/m^3$)

LOCATION	NO. SAMP.	MIN.	FREQUENCY DISTRIBUTION, % 10	20	30	40	50	60	70	80	90	MAX.	ARITHMETIC MEAN	ARITHMETIC STD. DEV.	GEOMETRIC MEAN	GEOMETRIC STD. DEV.
NORTH CAROLINA																
CHARLOTTE 340700001 A01	25	0.20	0.44	0.65	0.77	0.93	1.20	1.30	1.70	2.30	3.50	9.50	1.82	2.01	1.24	2.36
DURHAM 341160001 A01	23	0.28	0.42	0.46	0.51	0.72	1.10	1.20	1.40	1.60	1.80	4.30	1.24	0.94	0.99	2.00
NORTH DAKOTA																
BISMARCK 350100001 A01	25	0.24	0.29	0.32	0.41	0.42	0.45	0.50	0.70	0.78	1.10	2.00	0.61	0.40	0.53	1.68
OHIO																
AKRON 360060001 A01	25	0.12	0.32	0.75	0.86	0.96	1.00	1.20	1.50	1.70	2.30	3.00	1.23	0.73	1.00	2.09
CINCINNATI 361220001 A01	26	0.24	0.55	0.64	0.86	1.00	1.20	1.50	1.90	2.30	2.70	7.50	1.77	1.77	1.28	2.21
CLEVELAND 361300001 A01	26	0.46	0.68	0.90	0.99	1.30	1.40	1.70	1.90	2.00	3.10	4.00	1.61	0.88	1.40	1.74
COLUMBUS 361460001 A01	24	0.38	0.62	0.66	0.78	0.95	1.00	1.10	1.30	1.70	2.20	3.30	1.20	0.68	1.05	1.67
DAYTON 361660001 A01	26	0.32	0.44	0.71	0.78	0.91	1.00	1.30	1.40	2.00	2.90	4.50	1.40	1.01	1.12	1.95
TOLEDO 366600001 A01	23	0.27	0.29	0.42	0.64	0.85	0.90	1.10	1.10	1.40	1.50	2.10	0.94	0.52	0.79	1.90
YOUNGSTOWN 367760001 A01	25	0.37	0.56	0.66	0.83	0.88	0.93	0.94	1.30	1.50	2.10	5.20	1.21	0.95	1.02	1.74
OKLAHOMA																
OKLAHOMA CITY 372200001 A01	22	0.30	0.35	0.43	0.47	0.51	0.64	0.71	0.83	0.99	1.50	1.90	0.78	0.45	0.67	1.71
TULSA 373000001 A01	24	0.09	0.12	0.17	0.23	0.30	0.38	0.49	0.61	0.80	0.83	0.95	0.44	0.28	0.35	2.08
OREGON																
MEDFORD 381160001 A01	25	0.0	0.21	0.27	0.33	0.43	0.46	0.57	0.78	0.86	1.30	2.50	0.68	0.60	0.46	3.20
PORTLAND 381460001 A01	26	0.29	0.41	0.55	0.72	0.85	0.90	1.00	1.10	1.30	1.80	3.90	1.06	0.72	0.89	1.78
PENNSYLVANIA																
ALLENTOWN 390120001 A01	26	0.22	0.31	0.36	0.50	0.59	0.63	0.75	1.30	1.60	2.10	2.70	0.93	0.70	0.73	2.03
ALTOONA 390140001 A01	23	0.09	0.15	0.22	0.28	0.38	0.48	0.63	0.80	1.00	1.60	2.30	0.70	0.58	0.50	2.39
BETHLEHEM 390780302 A01	24	0.18	0.26	0.36	0.47	0.49	0.53	0.57	0.74	1.50	2.10	3.10	0.86	0.75	0.65	2.10
HARRISBURG 393980001 A01	26	0.25	0.29	0.36	0.40	0.44	0.50	0.58	0.68	1.10	1.20	2.40	0.68	0.48	0.57	1.77
HAZLETON 393960001 A01	24	0.10	0.34	0.46	0.55	0.60	0.65	0.84	0.93	1.10	1.50	1.90	0.81	0.46	0.68	1.90
JOHNSTOWN 394460001 A01	23	0.37	0.41	0.51	0.59	0.67	0.86	0.98	1.10	1.60	2.20	3.50	1.12	0.84	0.90	1.90
PHILADELPHIA 397140001 A01	26	0.18	0.69	0.87	1.00	1.20	1.40	1.60	1.70	2.10	4.40	7.50	1.97	1.77	1.47	2.16
PITTSBURGH 397260001 A01	26	0.55	0.79	0.83	0.92	0.99	1.40	1.50	2.30	2.70	3.60	4.90	1.81	1.20	1.48	1.89
READING 397620001 A01	25	0.29	0.46	0.52	0.66	0.69	0.86	1.00	1.70	1.70	2.60	3.70	1.22	0.90	0.97	1.96
SCRANTON 398040001 A01	25	0.65	1.10	1.10	1.20	1.60	2.00	2.40	2.50	2.90	4.20	6.30	2.28	1.36	1.96	1.75
WARMINSTER 399160001 A01	25	0.09	0.13	0.15	0.20	0.26	0.31	0.35	0.52	0.63	1.20	1.40	0.46	0.39	0.34	2.20
WEST CHESTER 399280001 A01	24	0.14	0.23	0.25	0.27	0.44	0.47	0.57	0.77	0.86	1.10	1.60	0.58	0.37	0.47	1.94
WILKES-BARRE 399430001 A01	24	0.0	0.02	0.05	0.38	0.41	0.41	0.49	0.68	0.93	1.30	1.60	0.54	0.48	0.26	5.26
YORK 399560001 A01	25	0.05	0.16	0.26	0.56	0.68	0.96	1.00	1.20	1.30	1.90	2.80	0.93	0.65	0.65	2.76
PUERTO RICO																
BAYAMON 400380001 A01	25	0.06	0.16	0.24	0.40	0.48	0.60	0.61	0.81	0.95	1.50	2.30	0.69	0.52	0.51	2.35
CATANO 400680001 A01	25	0.15	0.24	0.35	0.44	0.50	0.56	0.61	0.69	0.75	0.89	1.50	0.61	0.31	0.53	1.72

Table 9-1 (continued). LEAD, URBAN FREQUENCY DISTRIBUTIONS, 1968

($\mu g/m^3$)

LOCATION	NO. SAMP.	MIN.	FREQUENCY DISTRIBUTION, %									MAX.	ARITHMETIC		GEOMETRIC	
			10	20	30	40	50	60	70	80	90		MEAN	STD. DEV.	MEAN	STD. DEV.
PUERTO RICO																
GUAYANILLA																
401040001 A01	25	0.0	0.02	0.03	0.04	0.04	0.06	0.07	0.14	0.21	0.45	0.70	0.14	0.18	0.07	3.57
PONCE																
401920001 A01	25	0.21	0.30	0.39	0.47	0.51	0.57	0.65	0.73	0.77	0.94	0.97	0.60	0.21	0.56	1.49
RHODE ISLAND																
EAST PROVIDENCE																
410120001 A01	26	0.23	0.31	0.46	0.49	0.56	0.66	0.72	0.85	0.88	1.20	1.70	0.71	0.34	0.64	1.61
PROVIDENCE																
410300001 A01	25	0.53	0.71	0.79	0.81	1.10	1.40	1.40	1.60	1.90	2.10	3.40	1.39	0.66	1.26	1.58
SOUTH CAROLINA																
COLUMBIA																
420760001 A01	24	0.10	0.28	0.34	0.44	0.51	0.68	0.87	1.20	1.70	1.90	5.50	1.11	1.18	0.73	2.57
GREENVILLE																
421140001 A01	25	0.33	0.46	0.69	0.87	1.10	1.50	1.40	2.50	2.80	5.00	7.50	2.06	1.87	1.45	2.37
SOUTH DAKOTA																
SIOUX FALLS																
431400001 A01	23	0.08	0.11	0.15	0.20	0.26	0.32	0.44	0.60	0.73	0.94	3.30	0.55	0.491	0.35	2.52
TENNESSEE																
CHATTANOOGA																
440340001 A01	25	0.35	0.56	0.62	0.77	0.92	1.00	1.40	2.00	2.30	3.10	3.60	1.47	0.981	1.19	1.97
KNOXVILLE																
441740001 A01	26	0.25	0.42	0.56	0.67	0.87	0.96	1.20	1.50	1.70	1.70	5.10	1.18	0.94	0.96	1.91
MEMPHIS																
447340001 A01	25	0.24	0.32	0.39	0.47	0.50	0.52	0.58	0.72	0.87	1.30	2.80	0.72	0.561	0.60	1.74
NASHVILLE																
449240001 A01	25	0.18	0.27	0.29	0.44	0.75	0.87	1.00	1.30	1.40	1.50	4.50	0.99	0.86	0.75	2.17
TEXAS																
DALLAS																
451310002 A01	26	0.66	0.81	1.20	1.30	1.70	2.00	2.30	2.60	2.70	3.40	4.80	2.17	1.741	1.84	1.80
HOUSTON																
452360001 A01	26	0.40	0.62	0.84	1.00	1.20	1.40	1.90	2.00	2.40	4.20	4.50	1.86	1.401	1.63	1.97
PASADENA																
452420001 A01	26	0.0	0.34	0.40	0.50	0.64	0.69	0.81	0.98	0.99	1.60	2.50	0.84	0.591	0.61	3.09
SAN ANTONIO																
456570001 A01	25	0.16	0.29	0.36	0.45	0.54	0.59	0.68	1.10	1.20	3.80	4.60	1.10	1.201	0.72	2.43
UTAH																
OGDEN																
490690001 A01	25	0.27	0.29	0.32	0.37	0.41	0.54	0.65	0.85	0.94	2.10	2.30	0.81	0.661	0.63	2.01
SALT LAKE CITY																
490350001 A01	26	0.21	0.41	0.54	0.57	0.66	0.85	1.00	1.30	2.40	3.40	5.00	1.35	1.261	0.98	2.27
VERMONT																
RUTLAND																
470140001 A01	24	0.12	0.16	0.19	0.23	0.25	0.27	0.37	0.44	0.58	0.65	1.00	0.38	0.221	0.32	1.76
VIRGINIA																
DANVILLE																
480920001 A01	25	0.14	0.16	0.21	0.24	0.27	0.41	0.59	1.20	1.30	1.50	1.80	0.69	0.561	0.48	2.42
HAMPTON																
481440001 A01	25	0.10	0.16	0.23	0.24	0.28	0.41	0.48	0.58	0.64	1.00	1.30	0.48	0.321	0.39	1.97
LYNCHBURG																
481940301 A01	25	0.32	0.52	0.90	1.10	1.30	1.40	1.70	2.10	2.40	3.10	4.20	1.70	1.001	1.41	1.91
NORFOLK																
482140001 A01	26	0.11	0.16	0.27	0.32	0.36	0.38	0.41	0.49	0.54	0.91	1.50	0.48	0.321	0.40	1.85
PORTSMOUTH																
482440001 A01	26	0.15	0.29	0.30	0.37	0.51	0.54	0.59	0.69	0.82	1.30	1.90	0.63	0.411	0.53	1.81
RICHMOND																
482960001 A01	26	0.17	0.26	0.37	0.40	0.47	0.56	0.88	1.10	1.20	1.70	3.60	0.92	0.851	0.67	2.18
ROANOKE																
482700001 A01	25	0.09	0.20	0.23	0.32	0.33	0.42	0.55	0.75	0.99	1.70	2.40	0.68	0.591	0.49	2.26
WASHINGTON																
SEATTLE																
491460001 A01	26	0.24	0.40	0.51	0.52	0.85	1.00	1.30	1.90	2.30	3.20	3.60	1.40	1.051	1.04	2.24
WEST VIRGINIA																
CHARLESTON																
500240001 A01	26	0.19	0.33	0.49	0.55	0.67	0.69	0.72	0.90	1.10	2.00	3.50	0.91	0.711	0.74	1.88
WISCONSIN																
EAU CLAIRE																
510840001 A01	24	0.11	0.18	0.24	0.27	0.27	0.29	0.40	0.45	0.58	0.65	1.10	0.40	0.251	0.34	1.76

Table 9-1 (continued). LEAD, URBAN FREQUENCY DISTRIBUTIONS, 1968

($\mu g/m^3$)

LOCATION	NO. SAMP.	MIN.	FREQUENCY DISTRIBUTION, %									MAX.	ARITHMETIC		GEOMETRIC	
			10	20	30	40	50	60	70	80	90		MEAN	STD. DEV.	MEAN	STD. DEV.
WISCONSIN																
KENOSHA																
511540001 A01	25	0.15	0.23	0.26	0.33	0.39	0.48	0.54	0.69	0.73	0.97	1.50	0.56	0.35	0.47	1.83
MADISON																
511480001 A01	25	0.44	0.47	0.51	0.72	0.80	0.86	0.88	1.10	1.30	2.00	2.70	1.01	0.56	0.90	1.62
MILWAUKEE																
512200001 A01	25	0.17	0.41	0.48	0.58	0.74	1.00	1.20	1.50	1.60	2.00	2.90	1.13	0.71	0.91	2.07
SUPERIOR																
513480001 A01	23	0.05	0.06	0.11	0.13	0.15	0.23	0.24	0.25	0.43	0.80	2.00	0.34	0.44	0.22	2.51
WYOMING																
CASPER																
520120001 A01	26	0.04	0.07	0.10	0.11	0.13	0.14	0.18	0.21	0.22	0.37	0.71	0.19	0.14	0.15	1.89
CHEYENNE																
520140001 A01	26	0.05	0.07	0.08	0.09	0.11	0.14	0.15	0.19	0.19	0.21	0.75	0.16	0.14	0.13	1.81

Table 9-2. LEAD, NONURBAN FREQUENCY DISTRIBUTIONS, 1968

($\mu g/m^3$)

LOCATION	NO. SAMP.	MIN.	FREQUENCY DISTRIBUTION, %									MAX.	ARITHMETIC		GEOMETRIC	
			10	20	30	40	50	60	70	80	90		MEAN	STD. DEV.	MEAN	STD. DEV.
ARIZONA																
GRAND CANYON NAT PK																
040370031 A03	25	0.0	0.0	0.0	0.016	0.020	0.026	0.029	0.036	0.058	0.082	0.190	0.038	0.05	0.019	3.97
ARKANSAS																
MONTGOMERY CO																
051740001 A03	25	0.0	0.0	0.0	0.006	0.009	0.013	0.014	0.017	0.018	0.034	0.087				
CALIFORNIA																
HUMBOLDT CO																
060130001 A03	26	0.0	0.014	0.032	0.049	0.072	0.100	0.150	0.170	0.170	0.200	0.500	0.118	0.10	0.071	3.46
COLORADO																
MESA VERDE NAT PARK																
061510002 A03	21	0.0	NO. OF SAMPLES (17) BELOW MIN. DET. EXCEEDS 50%									0.018				
DELAWARE																
KENT CO																
080060001 A03	24	0.029	0.047	0.050	0.066	0.078	0.083	0.095	0.100	0.160	0.180	0.250	0.098	0.06	0.086	1.71
IDAHO																
BUTTE CO																
130360001 A03	24	0.0	0.0	0.0	0.006	0.012	0.016	0.021	0.024	0.027	0.034	0.270	0.027	0.05	0.012	3.62
INDIANA																
MONROE CO																
152400001 A03	24	0.0	0.016	0.028	0.040	0.044	0.048	0.058	0.065	0.085	0.130	0.190	0.060	0.04	0.045	2.91
PARKE CO																
153260001 A03	25	0.006	0.014	0.016	0.021	0.026	0.035	0.043	0.052	0.056	0.072	0.083	0.038	0.02	0.031	1.99
MAINE																
ACADIA NAT PARK																
200010001 A03	25	0.0	0.009	0.013	0.016	0.021	0.022	0.026	0.031	0.039	0.086	0.120	0.032	0.03	0.022	2.62
MARYLAND																
CALVERT CO																
210280001 A03	23	0.065	0.074	0.079	0.093	0.130	0.150	0.170	0.180	0.210	0.230	0.280	0.149	0.06	0.137	1.56
MISSISSIPPI																
JACKSON CO																
251740001 A03	24	0.0	0.0	0.013	0.019	0.025	0.031	0.045	0.062	0.077	0.110	0.160	0.046	0.04	0.026	3.59
MISSOURI																
SHANNON CO																
264480001 A03	25	0.0	0.0	0.005	0.012	0.016	0.023	0.025	0.050	0.057	0.075	0.130	0.033	0.03	0.019	3.50
MONTANA																
GLACIER NAT PARK																
270570001 A03	25	0.0	0.0	0.0	0.006	0.007	0.014	0.016	0.017	0.026	0.032	0.055				
NEBRASKA																
THOMAS CO																
282490001 A03	24	0.0	0.0	0.0	0.005	0.006	0.010	0.011	0.015	0.022	0.025	0.028				
NEVADA																
WHITE PINE CO																
290560001 A03	26	0.0	0.0	0.0	0.0	0.009	0.010	0.014	0.022	0.025	0.029	0.079				
NEW HAMPSHIRE																
COOS CO																
300140001 A03	23	0.0	0.0	0.0	0.011	0.019	0.023	0.026	0.043	0.078	0.088	0.240				
NEW YORK																
JEFFERSON CO																
333340001 A03	26	0.0	0.019	0.027	0.033	0.041	0.050	0.067	0.094	0.100	0.150	0.240	0.071	0.06	0.047	3.13
NORTH CAROLINA																
CAPE HATTERAS NAT																
340590001 A03	25	0.006	0.008	0.014	0.024	0.032	0.044	0.053	0.058	0.079	0.100	0.170	0.050	0.04	0.035	2.54
OKLAHOMA																
CHEROKEE CO																
370480001 A03	25	0.005	0.013	0.017	0.022	0.025	0.029	0.030	0.038	0.048	0.060	0.092	0.033	0.02	0.028	1.94
OREGON																
CURRY CO																
380440001 A03	26	0.0	0.0	0.004	0.005	0.007	0.007	0.011	0.019	0.038	0.064	0.890	0.056	0.17	0.012	4.53
PENNSYLVANIA																
CLARION CO																
391740001 A03	26	0.019	0.022	0.042	0.048	0.064	0.065	0.086	0.110	0.130	0.140	0.230	0.083	0.05	0.068	1.96
RHODE ISLAND																
WASHINGTON CO																
410380001 A03	26	0.013	0.038	0.055	0.058	0.068	0.083	0.110	0.130	0.140	0.290	0.400	0.117	0.09	0.090	2.12
SOUTH CAROLINA																
RICHLAND CO																
421990001 A03	23	0.013	0.019	0.030	0.033	0.045	0.048	0.057	0.079	0.110	0.230	0.330	0.083	0.08	0.057	2.37
SOUTH DAKOTA																
BLACK HILLS NAT FO																
430110001 A03	26	0.0	NO. OF SAMPLES (20) BELOW MIN. DET. EXCEEDS 50%									0.024				

Table 9-2 (continued). LEAD, NONURBAN FREQUENCY DISTRIBUTIONS, 1968

($\mu g/m^3$)

LOCATION	NO. SAMP.	MIN.	FREQUENCY DISTRIBUTION, % 10	20	30	40	50	60	70	80	90	MAX.	ARITHMETIC MEAN	ARITHMETIC STD. DEV.	GEOMETRIC MEAN	GEOMETRIC STD. DEV.
TEXAS																
MATAGORDA CO																
453530001 A03	25	0.0	0.0	0.0	0.0	0.007	0.017	0.022	0.027	0.051	0.080	0.100				
VERMONT																
ORANGE CO																
470360001 A03	25	0.013	0.029	0.032	0.043	0.055	0.059	0.075	0.097	0.140	0.160	0.230	0.081	0.06	0.063	2.10
VIRGINIA																
SHENANDOAH NAT PAR																
482890001 A03	26	0.011	0.027	0.039	0.043	0.063	0.072	0.073	0.083	0.084	0.140	0.240	0.076	0.05	0.063	1.94
WYOMING																
YELLOWSTONE NAT PA																
520860001 A03	26	0.0	NO. OF SAMPLES (16) BELOW MIN. DET. EXCEEDS 50%									0.016				

Table 9-3. LEAD, URBAN QUARTERLY COMPOSITES AND YEARLY AVERAGES, 1969

($\mu g/m^3$)

LOCATION	1ST QTR.	2ND QTR.	3RD QTR.	4TH QTR.	YR. AVG.
ALABAMA					
GADSDEN					
011490001 A01	0.70	0.65	0.45	0.85	0.66
HUNTSVILLE					
011860001 A01	0.60	1.20	0.46	1.10	0.84
MOBILE					
012390001 A01	1.10	1.30	1.30	2.40	1.52
MONTGOMERY					
012460001 A01	0.49	1.40	0.62	1.30	0.95
ALASKA					
ANCHORAGE					
020040003 A01	1.60	0.79	1.10	1.10	1.15
FAIRBANKS					
020150001 A01	4.80	1.60	2.20	4.30	3.17
ARIZONA					
MARICOPA CO					
030440001 A01	0.31	0.21	0.15	0.28	0.24
PHOENIX					
030600002 A01	2.20	1.40	1.80	7.10	3.12
TUCSON					
030860001 A01	1.20	0.62	0.51	1.40	0.93
ARKANSAS					
LITTLE ROCK					
041440001 A01	1.10	1.30	0.89	1.10	1.10
TEXARKANA					
042360001 A01	0.35	0.30	0.45	0.86	0.49
WEST MEMPHIS					
042740001 A01	0.77	0.31	0.88	1.20	0.79
CALIFORNIA					
ANAHEIM					
050230001 A01	2.40	1.90	1.80	3.00	2.27
BURBANK					
050930001 A01	3.90	1.90	3.40	4.70	3.47
FRESNO					
052800001 A01	1.90	0.80	1.00	4.20	1.95
GLENDALE					
052940001 A01	2.30	2.20	3.30	4.50	3.07
LONG BEACH					
054100001 A01	4.00	1.70	1.50	4.50	2.92
LOS ANGELES					
054180001 A01	5.40	3.60	3.70	5.70	4.60
OAKLAND					
055320001 A01	3.30	2.40	1.70	3.90	2.82
ONTARIO					
055380001 A01	1.10	1.60	1.70	1.90	1.57
RIVERSIDE					
056400001 A01	2.70	1.40	2.30	2.90	2.32
SACRAMENTO					
056580001 A01	1.20	0.99	0.76	4.10	1.76
SAN BERNARDINO					
056640001 A01	1.10	1.10	2.00	0.89	1.27
SAN DIEGO					
056800001 A01	2.60	1.30	0.67	4.20	2.19
SAN FRANCISCO					
056860001 A01	1.90	1.40	1.40	3.10	1.95
SAN JOSE					
056980001 A01	2.00	1.60	1.30	2.90	1.95
SANTA ANA					
057180001 A01	2.50	1.10	1.60	3.30	2.17
TORRANCE					
058260001 A01	2.90	1.60	0.97	3.00	2.12
COLORADO					
DENVER					
060580001 A01	1.60	0.95	1.30	3.40	1.86
COLORADO (CONT)					
MONTEZUMA CO					
061400002 A01	0.0	0.03	0.03	0.02	0.02
CONNECTICUT					
BRIDGEPORT					
070040001 A01	0.87	0.64	1.20	1.40	1.03
HARTFORD					
070420001 A01	0.95	0.90	0.72	1.30	0.97
NEW HAVEN					
070700001 A01	0.61	1.20	1.10	1.40	1.09
WATERBURY					
071240001 A01	0.87	1.20	1.30	1.20	1.14
DELAWARE					
WILMINGTON					
080260003 A01	1.60	0.81	1.70	1.40	1.38
DIST COLUMBIA					
WASHINGTON					
090020001 A01	1.40	1.30	0.99	1.40	1.25
FLORIDA					
JACKSONVILLE					
101960002 A01	1.50	0.85	1.50	1.20	1.26
MIAMI					
102700001 A01	1.30	1.40	2.10	1.70	1.60
ST PETERSBURG					
103990002 A01	0.49	0.29	0.37	0.61	0.43
TAMPA					
104360002 A01	1.20	1.40	1.20	2.00	1.50
GEORGIA					
ATLANTA					
110290001 A01	1.30	1.90	2.00	1.40	1.65
COLUMBUS					
111780001 A01	0.78	1.00	0.53	1.00	0.83
SAVANNAH					
114500001 A01	0.46	0.50	0.98	0.43	0.59
HAWAII					
HONOLULU					
120120001 A01	1.30	1.00	0.71	1.70	1.18
IDAHO					
BOISE CITY					
130220001 A01	0.59	0.82	1.10	2.30	1.20
ILLINOIS					
CHICAGO					
141920001 A01	1.80	1.80	1.60	1.40	1.65
EAST ST LOUIS					
142120001 A01	1.50	0.90	0.71	1.00	1.03
JOLIET					
143760001 A01	1.00	1.40	1.10	1.60	1.27
NORTH CHICAGO					
145620002 A01	1.10	1.10	1.10	0.61	0.99
PEORIA					
146080001 A01	0.82	1.20	1.40	1.60	1.25
ROCKFORD					
146490001 A01	1.20	0.90	0.85	1.00	0.99
SPRINGFIELD					
147280001 A01	1.10	0.73	0.96	1.00	0.95
INDIANA					
EAST CHICAGO					
151180001 A01	3.00	3.60	2.10	1.50	2.55
EVANSVILLE					
151300001 A01	0.54	1.40	1.10	1.40	1.11
FORT WAYNE					
151380001 A01	1.40	0.78	1.50	2.10	1.44
GARY					
151520001 A01	0.87	0.92	1.70	1.10	1.15

Table 9-3 (continued). LEAD, URBAN QUARTERLY COMPOSITES AND YEARLY AVERAGES, 1969

($\mu g/m^3$)

LOCATION	1ST QTR.	2ND QTR.	3RD QTR.	4TH QTR.	YR. AVG.
INDIANA					
HAMMOND					
151780001 A01	1.20	1.30	1.40	1.10	1.25
INDIANAPOLIS					
152340001 A01	1.30	1.80	1.40	1.90	1.60
NEW ALBANY					
152980001 A01	1.10	1.40	2.10	1.30	1.47
SOUTH BEND					
153880001 A01	0.72	1.10	1.40	1.70	1.23
TERRE HAUTE					
154080001 A01	0.61	0.88	0.65	0.82	0.74
IOWA					
DAVENPORT					
161060001 A01	1.50	1.20	1.00	1.60	1.32
DES MOINES					
161180001 A01	0.55	0.88	0.83	1.30	0.91
DUBUQUE					
161260001 A01	1.20	0.85	0.68	0.95	0.92
KANSAS					
KANSAS CITY					
171800001 A01	0.64	0.45	0.98	2.20	1.07
TOPEKA					
173560001 A01	0.49	0.55	0.53	1.60	0.79
WICHITA					
173740001 A01	0.55	0.64	0.79	0.89	0.72
KENTUCKY					
ASHLAND					
180080002 A01	1.30	1.10	1.20	0.95	1.14
COVINGTON					
180820001 A01	0.78	2.00	1.70	1.60	1.52
LOUISVILLE					
182380001 A01	1.30	1.70	1.30	0.94	1.31
LOUISIANA					
BATON ROUGE					
190280001 A01	0.48	0.96	1.10	1.10	0.91
NEW ORLEANS					
192020002 A01	1.40	1.00	1.00	1.20	1.15
SHREVEPORT					
192740001 A01	0.53	0.65	0.63	2.40	1.05
MARYLAND					
BALTIMORE					
210120001 A01	1.70	1.20	1.70	2.10	1.67
MASSACHUSETTS					
BOSTON					
220240001 A01	1.30	0.97	1.40	1.20	1.19
FALL RIVER					
220580002 A01	0.56	0.82	0.57	0.68	0.66
SPRINGFIELD					
221160001 A01	1.30	1.50	1.10	2.40	1.72
WORCHESTER					
222640001 A01	1.60	0.79	1.10	0.89	1.09
MICHIGAN					
DEARBORN					
231140001 A01	1.90	1.30	1.30	1.80	1.55
DETROIT					
231180001 A01	1.60	2.10	2.10	1.50	1.82
FLINT					
231580001 A01	0.96	0.58	0.99	1.50	0.98
GRAND RAPIDS					
231820001 A01	0.95	3.90	0.75	0.81	1.60
LANSING					
232840001 A01	0.84	1.20	1.10	1.10	1.06
SAGINAW					
234740001 A01	0.97	0.90	0.88	0.97	0.93

LOCATION	1ST QTR.	2ND QTR.	3RD QTR.	4TH QTR.	YR. AVG.
MICHIGAN (CONT)					
TRENTON					
235120001 A01	1.00	0.66	0.89	1.20	0.94
MINNESOTA					
DULUTH					
241040001 A01	0.75	1.10	1.20	0.57	0.90
MINNEAPOLIS					
242260001 A01	0.68	0.89	0.65	1.30	0.88
ST PAUL					
243300001 A01	1.10	0.86	0.74	0.61	0.93
MISSOURI					
KANSAS CITY					
262380001 A01	0.97	0.65	1.10	2.20	1.23
ST LOUIS					
264280001 A01	1.50	2.00	2.00	2.60	2.02
MONTANA					
HELENA					
270720001 A01	0.85	0.22	0.24	0.78	0.52
NEBRASKA					
OMAHA					
281880001 A01	0.87	0.94	1.50	1.20	1.13
NEVADA					
LAS VEGAS					
290320001 A01	1.30	0.60	1.40	2.40	1.42
RENO					
290480001 A01	1.40	0.81	1.40	3.00	1.65
NEW HAMPSHIRE					
CONCORD					
300120001 A01	0.33	0.64	0.62	0.48	0.52
NEW JERSEY					
BURLINGTON CO					
310660002 A01	0.60	0.51	1.50	1.20	0.95
ELIZABETH					
311300001 A01	1.10	1.40	1.50	0.93	1.23
GLASSBORO					
311700301 A01	0.67	0.75	0.84	1.00	0.81
HAMILTON					
311940001 A01	0.44	0.82	1.40	1.20	0.96
JERSEY CITY					
312320001 A01	1.00	1.30	0.89	1.20	1.10
NEWARK					
313480001 A01	1.30	1.60	1.90	1.80	1.65
PATERSON					
314140001 A01	1.70	1.60	1.80	1.90	1.75
PERTH AMBOY					
314220001 A01	1.00	0.92	1.30	1.00	1.05
TRENTON					
315400001 A01	0.50	0.78	1.60	0.77	0.91
NEW MEXICO					
ALBUQUERQUE					
320040001 A01	0.79	0.50	0.94	1.90	1.03
NEW YORK					
ALBANY					
330040001 A01	0.56	0.50	1.00	0.88	0.73
BUFFALO					
330660001 A01	1.00	1.30	1.40	1.00	1.17
NEW YORK CITY					
334680001 A01	1.70	2.20	0.73	1.50	1.53
NIAGARA FALLS					
334740001 A01	0.58	0.52	0.87	0.29	0.56
ROCHESTER					
335760001 A01	0.55	0.91	1.40	1.80	1.16
SYRACUSE					
336420001 A01	0.96	1.10	1.10	1.20	1.09

Table 9-3 (continued). LEAD, URBAN QUARTERLY COMPOSITES AND YEARLY AVERAGES, 1969

($\mu g/m^3$)

LOCATION	1ST QTR.	2ND QTR.	3RD QTR.	4TH QTR.	YR. AVG.
NEW YORK					
UTICA					
336880001 A01	1.00	0.91	1.00	1.30	1.05
NORTH CAROLINA					
CHARLOTTE					
340700001 A01	1.40	1.20	1.10	1.40	1.27
DURHAM					
341160001 A01	0.73	0.87	0.77	1.22	0.98
GREENSBORO					
341740001 A01	1.10	0.69	1.30	1.60	1.12
WINSTON-SALEM					
344660002 A01	0.96	1.10	1.40	1.50	1.33
NORTH DAKOTA					
BISMARCK					
350100001 A01	0.83	0.70	0.59	1.30	0.85
OHIO					
AKRON					
360060001 A01	1.10	1.10	1.70	1.30	1.30
CANTON					
361220001 A01	0.92	1.10	1.40	1.10	1.13
CINCINNATI					
361220001 A01	1.20	1.00	1.50	1.10	1.20
CLEVELAND					
361330001 A01	1.00	2.30	1.40	0.95	1.41
COLUMBUS					
361460001 A01	0.91	1.10	0.70	1.40	1.05
DAYTON					
361660001 A01	0.80	1.70	1.50	0.88	1.24
TOLEDO					
366400001 A01	0.73	1.30	1.10	1.00	1.05
YOUNGSTOWN					
367760001 A01	1.20	1.10	1.50	0.83	1.14
OKLAHOMA					
OKLAHOMA CITY					
372270001 A01	0.73	0.77	1.40	2.10	1.25
TULSA					
373000001 A01	0.72	0.55	0.49	1.30	0.76
OREGON					
MEDFORD					
381160001 A01	0.63	0.83	0.74	1.60	0.89
PORTLAND					
381460001 A01	0.95	1.20	0.98	2.70	1.46
PENNSYLVANIA					
ALLENTOWN					
390120001 A01	0.92	1.20	1.30	0.90	1.08
BETHLEHEM					
390780002 A01	0.73	0.96	1.10	1.30	0.92
ERIE					
393060002 A01	0.74	0.48	0.44	0.28	0.48
HARRISBURG					
393890001 A01	0.83	0.91	1.10	0.79	0.88
HAZLETON					
394360001 A01	0.91	0.96	0.99	0.83	0.92
JOHNSTOWN					
394460001 A01	0.54	0.90	0.89	0.74	0.77
PHILADELPHIA					
397140001 A01	1.10	1.60	2.20	1.30	1.55
PITTSBURGH					
397760001 A01	1.70	2.00	1.70	1.10	1.62
READING					
397620001 A01	0.87	0.84	1.30	1.10	1.03
SCRANTON					
398040001 A01	2.00	2.30	1.90	2.10	2.07
WARMINSTER					
399160001 A01	0.33	0.58	0.62	0.84	0.59
(CONT.)					
WEST CHESTER					
399280001 A01	0.93	1.00	1.20	1.30	1.11
WILKES-BARRE					
399430001 A01	1.00	0.78	0.99	1.00	0.94
YORK					
399560001 A01	0.89	1.00	0.94	2.00	1.21
PUERTO RICO					
BAYAMON					
400380001 A01	1.70	1.70	2.00	2.80	2.05
CATANO					
400560002 A01	0.99	1.30	1.90	1.40	1.38
GUAYANILLA					
401080001 A01	0.08	0.08	0.14	0.20	0.13
PONCE					
401920001 A01	1.30	1.30	1.40	2.20	1.60
SAN JUAN					
402140001 A01	3.40	3.60	4.20	4.00	3.77
RHODE ISLAND					
EAST PROVIDENCE					
410120001 A01	0.71	0.70	0.26	0.26	0.48
PROVIDENCE					
410300001 A01	1.20	0.70	1.40	1.50	1.20
SOUTH CAROLINA					
COLUMBIA					
420760001 A01	0.45	0.55	0.70	0.57	0.57
GREENVILLE					
421180001 A01	1.70	1.10	1.00	2.00	1.45
TENNESSEE					
CHATTANOOGA					
440380001 A01	0.75	1.30	0.98	1.30	1.08
KNOXVILLE					
441740001 A01	0.92	0.96	1.30	1.30	1.12
MEMPHIS					
442340001 A01	0.73	1.00	1.20	1.30	1.06
NASHVILLE					
442540001 A01	0.91	1.50	1.10	1.20	1.18
TEXAS					
DALLAS					
451310002 A01	2.90	1.70	2.30	5.20	3.02
EL PASO					
451700301 A01	1.20	1.50	1.60	3.70	2.00
FORT WORTH					
451890001 A01	1.50	1.10	1.10	2.30	1.50
HOUSTON					
452360001 A01	2.70	1.90	1.90	2.80	2.20
PASADENA					
452400001 A01	0.77	0.88	1.10	0.73	0.87
SAN ANTONIO					
454570001 A01	1.30	0.50	0.76	3.50	1.51
UTAH					
OGDEN					
460680001 A01	0.80	0.80	1.30	2.70	1.42
SALT LAKE CITY					
460920001 A01	1.90	0.64	1.20	3.60	1.83
VERMONT					
BURLINGTON					
470140001 A01	0.52	0.50	0.37	0.78	0.54
VIRGINIA					
DANVILLE					
480920001 A01	0.62	0.41	0.77	0.72	0.63
HAMPTON					
481440001 A01	0.56	0.51	0.54	0.50	0.53

Table 9-3 (continued). LEAD, URBAN QUARTERLY COMPOSITES AND YEARLY AVERAGES, 1969

($\mu g/m^3$)

LOCATION	1ST QTR.	2ND QTR.	3RD QTR.	4TH QTR.	YR. AVG.
VIRGINIA					
LYNCHBURG					
491540001 A01	1.50	1.70	2.10	1.30	1.65
NEWPORT NEWS					
492120001 A01	0.78	0.58	0.42	0.74	0.63
NORFOLK					
492140001 A01	0.55	0.58	0.44	0.46	0.51
PORTSMOUTH					
492440001 A01	0.96	0.26	0.95	0.65	0.70
RICHMOND					
492660001 A01	1.20	0.38	2.60	1.70	1.62
ROANOKE					
492700001 A01	0.85	0.98	1.20	1.10	1.03
WASHINGTON					
SEATTLE					
491840001 A01	1.50	1.30	1.30	2.00	1.75
SPOKANE					
492040001 A01	0.83	0.71	0.00	0.93	0.48
TACOMA					
492140001 A01	1.10	0.94	1.10	2.00	1.52

LOCATION	1ST QTR.	2ND QTR.	3RD QTR.	4TH QTR.	YR. AVG.
WEST VIRGINIA					
CHARLESTON					
500240001 A01	0.93	0.95	0.76	1.00	0.98
WISCONSIN					
EAU CLAIRE					
510840001 A01	0.29	0.37	0.46	0.53	0.41
KENOSHA					
511540001 A01	0.78	1.10	0.51	1.00	0.85
MADISON					
511860001 A01	0.85	0.82	1.10	1.70	1.12
MILWAUKEE					
512200001 A01	1.10	1.60	1.30	1.60	1.40
RACINE					
512880001 A01	0.48	0.36	0.59	0.59	0.50
SUPERIOR					
513440001 A01	0.46	0.44	0.41	0.47	0.44
WYOMING					
CASPER					
520120001 A01	0.18	0.73	0.62	0.54	0.52
CHEYENNE					
520140001 A01	0.25	0.17	0.38	0.40	0.30

Table 9-4. LEAD, NONURBAN QUARTERLY COMPOSITES AND YEARLY AVERAGES, 1969

($\mu g/m^3$)

LOCATION	1ST QTR.	2ND QTR.	3RD QTR.	4TH QTR.	YR. AVG.
ARIZONA					
GRAND CANYON NAT PI					
030370001 A03	0.097	0.120	0.300	0.096	0.153
ARKANSAS					
MONTGOMERY CO					
041760001 A03	0.038	0.099	0.097	0.058	0.063
CALIFORNIA					
HUMBOLDT CO					
063330001 A03	0.410	0.100	0.250	0.420	0.295
FLORIDA					
HARDEE CO					
171640001 A03	0.130	0.063	0.079	0.100	0.093
IDAHO					
BUTTE CO					
130340001 A03	0.022	0.012	0.027	0.059	0.030
INDIANA					
MONROE CO					
152830001 A03	0.160	0.120	0.130	0.160	0.137
PARKE CO					
153740001 A03	0.130	0.140	0.110	0.210	0.147
MAINE					
ACADIA NAT PARK					
200010001 A03	0.038	0.063	0.091	0.333	0.056
MARYLAND					
CALVERT CO					
310280001 A03	0.220	0.230	0.210	0.120	0.195
MISSOURI					
SHANNON CO					
246490002 A03	0.051	0.056	0.096	0.090	0.072
MONTANA					
GLACIER NAT PARK					
276570001 A03	0.019	0.018	0.031	0.0	0.017
NEBRASKA					
THOMAS CO					
282490001 A03	0.020	0.017	0.021	0.020	0.019
NEVADA					
WHITE PINE CO					
290950001 A03	0.024	0.0	0.010	0.018	0.016
NEW HAMPSHIRE					
COOS CO					
300140001 A03	0.024	0.047	0.021	0.045	0.034
NEW YORK					
JEFFERSON CO					
333340001 A03	0.092	0.110	0.170	0.130	0.125

LOCATION	1ST QTR.	2ND QTR.	3RD QTR.	4TH QTR.	YR. AVG.
NORTH CAROLINA					
CAPE HATTERAS NAT					
340590001 A03	0.086	0.110	0.068	0.052	0.079
OKLAHOMA					
CHEROKEE CO					
370480001 A03	0.073	0.066	0.037	0.150	0.081
OREGON					
CURRY CO					
380440001 A03	0.035	0.016	0.023	0.260	0.083
PENNSYLVANIA					
CLARION CO					
391760001 A03	0.120	0.061	0.059	0.140	0.095
RHODE ISLAND					
WASHINGTON CO					
410390002 A03	0.200	0.082	0.250	0.029	0.140
SOUTH CAROLINA					
RICHLAND CO					
421900001 A03	0.057	0.140	0.200	0.110	0.127
SOUTH DAKOTA					
BLACK HILLS NAT FOR					
430130001 A03	0.022	0.017	0.020	0.031	0.022
TENNESSEE					
CUMBERLAND CO					
440690001 A03	0.100	0.068	0.100	0.100	0.092
TEXAS					
MATAGORDA CO					
453530001 A03	0.061	0.057	0.013	0.100	0.058
VERMONT					
ORANGE CO					
470360001 A03	0.073	0.092	0.180	0.170	0.129
VIRGINIA					
SHENANDOAH NAT PAR					
482890001 A03	0.053	0.150	0.140	0.120	0.116
WYTHE CO					
483440001 A03	0.066	0.041	0.098	0.061	0.061
WISCONSIN					
DOOR CO					
510740001 A03	0.048	0.054	0.170	0.074	0.086
WYOMING					
YELLOWSTONE NAT PA					
520860001 A03	0.0	0.0	0.013	0.014	*****

SECTION 10. URBAN AND NONURBAN METALS IN SUSPENDED PARTICULATES: MANGANESE

Table 10-1. MANGANESE, URBAN FREQUENCY DISTRIBUTIONS, 1968

($\mu g/m^3$)

LOCATION	NO. SAMP.	MIN.	FREQUENCY DISTRIBUTION, %									MAX.	ARITHMETIC		GEOMETRIC	
			10	20	30	40	50	60	70	80	90		MEAN	STD. DEV.	MEAN	STD. DEV.
ALABAMA																
GADSDEN																
011480001 A01	25	0.0	0.0	0.0	0.02	0.03	0.04	0.06	0.07	0.10	0.17	0.46	0.07	0.09	0.04	3.47
HUNTSVILLE																
011860001 A01	26	0.0	NO. OF SAMPLES (15) BELOW MIN. DET. EXCEEDS 50%									0.08				
MOBILE																
012380001 A01	25	0.0	NO. OF SAMPLES (17) BELOW MIN. DET. EXCEEDS 50%									0.09				
MONTGOMERY																
012460001 A01	26	0.0	NO. OF SAMPLES (21) BELOW MIN. DET. EXCEEDS 50%									0.11				
ALASKA																
ANCHORAGE																
020040003 A01	26	0.0	NO. OF SAMPLES (18) BELOW MIN. DET. EXCEEDS 50%									0.11				
FAIRBANKS																
020160001 A01	23	0.0	NO. OF SAMPLES (13) BELOW MIN. DET. EXCEEDS 50%									0.11				
ARIZONA																
MARICOPA CO																
030440001 A01	25	0.0	NO. OF SAMPLES (24) BELOW MIN. DET. EXCEEDS 50%									0.02				
PHOENIX																
030600002 A01	26	0.0	0.0	0.0	0.0	0.03	0.03	0.04	0.05	0.07	0.08	0.11				
TUCSON																
030860001 A01	26	0.0	NO. OF SAMPLES (26) BELOW MIN. DET. EXCEEDS 50%									0.0				
ARKANSAS																
LITTLE ROCK																
041440001 A01	25	0.0	NO. OF SAMPLES (19) BELOW MIN. DET. EXCEEDS 50%									0.10				
TEXARKANA																
042560001 A01	25	0.0	NO. OF SAMPLES (19) BELOW MIN. DET. EXCEEDS 50%									0.07				
WEST MEMPHIS																
042740001 A01	26	0.0	0.0	0.0	0.0	0.03	0.03	0.05	0.17	0.23	0.36	0.76				
CALIFORNIA																
BURBANK																
050900001 A01	26	0.0	0.0	0.0	0.0	0.0	0.02	0.03	0.03	0.04	0.05	0.10				
GLENDALE																
052940001 A01	25	0.0	NO. OF SAMPLES (24) BELOW MIN. DET. EXCEEDS 50%									0.04				
LONG BEACH																
054100001 A01	26	0.0	0.0	0.0	0.0	0.0	0.0	0.02	0.03	0.04	0.07	0.12				
LOS ANGELES																
054180001 A01	26	0.0	NO. OF SAMPLES (20) BELOW MIN. DET. EXCEEDS 50%									0.07				
OAKLAND																
055300001 A01	25	0.0	NO. OF SAMPLES (16) BELOW MIN. DET. EXCEEDS 50%									0.17				
ONTARIO																
055380001 A01	24	0.0	0.0	0.0	0.0	0.03	0.03	0.05	0.05	0.07	0.09	0.21				
PASADENA																
055760001 A01	25	0.0	NO. OF SAMPLES (20) BELOW MIN. DET. EXCEEDS 50%									0.05				
RIVERSIDE																
056400001 A01	26	0.0	0.0	0.0	0.0	0.0	0.0	0.03	0.03	0.04	0.04	0.06				
SACRAMENTO																
056580001 A01	26	0.0	NO. OF SAMPLES (23) BELOW MIN. DET. EXCEEDS 50%									0.03				
SAN BERNARDINO																
056680001 A01	26	0.0	NO. OF SAMPLES (16) BELOW MIN. DET. EXCEEDS 50%									0.05				
SAN DIEGO																
056800001 A01	26	0.0	NO. OF SAMPLES (26) BELOW MIN. DET. EXCEEDS 50%									0.0				
SAN FRANCISCO																
056860001 A01	26	0.0	NO. OF SAMPLES (26) BELOW MIN. DET. EXCEEDS 50%									0.0				
COLORADO																
DENVER																
060580001 A01	24	0.0	NO. OF SAMPLES (16) BELOW MIN. DET. EXCEEDS 50%									0.08				
CONNECTICUT																
HARTFORD																
070420001 A01	26	0.0	NO. OF SAMPLES (24) BELOW MIN. DET. EXCEEDS 50%									0.04				
NEW HAVEN																
070730001 A01	26	0.0	NO. OF SAMPLES (24) BELOW MIN. DET. EXCEEDS 50%									0.06				
DELAWARE																
NEWARK																
080140001 A01	24	0.0	0.0	0.0	0.0	0.0	0.02	0.02	0.02	0.04	0.04	0.14				
WILMINGTON																
080260001 A01	23	0.0	NO. OF SAMPLES (13) BELOW MIN. DET. EXCEEDS 50%									0.11				

Table 10-1 (continued). MANGANESE, URBAN FREQUENCY DISTRIBUTIONS, 1968

($\mu g/m^3$)

LOCATION	NO. SAMP.	MIN.	FREQUENCY DISTRIBUTION, %									MAX.	ARITHMETIC		GEOMETRIC	
			10	20	30	40	50	60	70	80	90		MEAN	STD. DEV.	MEAN	STD. DEV.
DIST COLUMBIA																
WASHINGTON																
090020001 A01	26	0.0	NO. OF SAMPLES (21) BELOW MIN. DET. EXCEEDS 50%									0.09				
FLORIDA																
JACKSONVILLE																
101960002 A01	25	0.0	NO. OF SAMPLES (17) BELOW MIN. DET. EXCEEDS 50%									0.06				
FLORIDA																
TAMPA																
104360002 A01	23	0.0	0.0	0.0	0.03	0.07	0.10	0.12	0.19	0.27	0.31	0.62	0.15	0.15	0.07	4.89
GEORGIA																
ATLANTA																
110200001 A01	26	0.0	0.0	0.0	0.0	0.0	0.02	0.04	0.05	0.06	0.13	0.78				
HAWAII																
HONOLULU																
120120001 A01	26	0.0	NO. OF SAMPLES (24) BELOW MIN. DET. EXCEEDS 50%									0.03				
IDAHO																
BOISE CITY																
130220001 A01	26	0.0	NO. OF SAMPLES (21) BELOW MIN. DET. EXCEEDS 50%									0.03				
ILLINOIS																
CHICAGO																
141220001 A01	25	0.0	0.0	0.02	0.03	0.04	0.05	0.08	0.10	0.13	0.24	0.26	0.09	0.08	0.05	3.23
EAST ST LOUIS																
142120001 A01	25	0.0	0.0	0.0	0.03	0.03	0.04	0.04	0.05	0.07	0.07	0.12	0.04	0.03	0.03	2.69
JOLIET																
143760001 A01	21	0.0	0.0	0.0	0.0	0.02	0.03	0.03	0.04	0.05	0.10	0.31				
ROCKFORD																
146680001 A01	25	0.0	0.0	0.0	0.0	0.0	0.02	0.02	0.11	0.20	0.46	1.10				
SPRINGFIELD																
147280001 A01	23	0.0	NO. OF SAMPLES (13) BELOW MIN. DET. EXCEEDS 50%									0.09				
INDIANA																
EAST CHICAGO																
151180001 A01	26	0.0	0.07	0.10	0.11	0.13	0.14	0.19	0.21	0.22	0.32	0.67	0.19	0.15	0.14	2.46
HAMMOND																
151780001 A01	26	0.0	0.03	0.05	0.06	0.07	0.08	0.09	0.17	0.23	0.30	0.38	0.13	0.11	0.08	2.97
INDIANAPOLIS																
152040001 A01	25	0.0	0.0	0.0	0.03	0.03	0.03	0.04	0.05	0.06	0.11	0.23	0.05	0.05	0.03	3.12
SOUTH BEND																
153880001 A01	24	0.0	0.0	0.0	0.06	0.08	0.09	0.12	0.14	0.25	0.43	0.64	0.15	0.17	0.06	5.20
IOWA																
CEDAR RAPIDS																
160640001 A01	26	0.0	NO. OF SAMPLES (14) BELOW MIN. DET. EXCEEDS 50%									0.11				
DES MOINES																
161180001 A01	26	0.0	0.0	0.0	0.02	0.02	0.03	0.04	0.05	0.07	0.10	0.13				
DUBUQUE																
161260001 A01	23	0.0	NO. OF SAMPLES (15) BELOW MIN. DET. EXCEEDS 50%									0.13				
KANSAS																
KANSAS CITY																
171800001 A01	25	0.0	0.0	0.0	0.0	0.0	0.03	0.03	0.04	0.05	0.08	0.13				
TOPEKA																
173560001 A01	26	0.0	NO. OF SAMPLES (18) BELOW MIN. DET. EXCEEDS 50%									0.06				
WICHITA																
173740001 A01	25	0.0	NO. OF SAMPLES (14) BELOW MIN. DET. EXCEEDS 50%									0.10				
KENTUCKY																
ASHLAND																
180080002 A01	23	0.0	0.03	0.06	0.07	0.10	0.12	0.13	0.16	0.21	0.28	0.35	0.14	0.09	0.10	2.63
COVINGTON																
180900001 A01	25	0.0	0.0	0.0	0.0	0.03	0.05	0.09	0.14	0.38	0.77	0.97				
LEXINGTON																
182300001 A01	24	0.0	0.0	0.0	0.03	0.03	0.03	0.04	0.04	0.06	0.08	0.23				
LOUISVILLE																
182380001 A01	25	0.0	0.0	0.0	0.03	0.04	0.06	0.06	0.07	0.09	0.20	0.39				
LOUISIANA																
NEW ORLEANS																
192020002 A01	25	0.0	0.0	0.0	0.03	0.03	0.04	0.05	0.07	0.08	0.11	0.39				
MAINE																
PORTLAND																
200960002 A01	21	0.0	NO. OF SAMPLES (19) BELOW MIN. DET. EXCEEDS 50%									0.10				
MARYLAND																
BALTIMORE																
210120001 A01	26	0.0	0.0	0.0	0.0	0.03	0.04	0.05	0.06	0.12	0.14	0.28				

Table 10-1 (continued). MANGANESE, URBAN FREQUENCY DISTRIBUTIONS, 1968

($\mu g/m^3$)

LOCATION	NO. SAMP.	MIN.	FREQUENCY DISTRIBUTION, %									MAX.	ARITHMETIC		GEOMETRIC	
			10	20	30	40	50	60	70	80	90		MEAN	STD. DEV.	MEAN	STD. DEV.
MASSACHUSETTS																
BOSTON																
220240001 A01	25	0.0	NO. OF SAMPLES (23) BELOW MIN. DET. EXCEEDS 50%									0.06				
WORCHESTER																
222640001 A01	24	0.0	NO. OF SAMPLES (16) BELOW MIN. DET. EXCEEDS 50%									0.24				
MICHIGAN																
DETROIT																
231180001 A01	26	0.0	0.03	0.04	0.09	0.11	0.16	0.18	0.20	0.23	0.4	0.55	0.16	0.13	0.11	3.27
FLINT																
231580001 A01	26	0.0	NO. OF SAMPLES (14) BELOW MIN. DET. EXCEEDS 50%									0.08				
GRAND RAPIDS																
231820001 A01	26	0.0	0.0	0.0	0.0	0.03	0.03	0.04	0.05	0.06	0.07	0.56				
TRENTON																
235120001 A01	25	0.0	0.0	0.02	0.03	0.04	0.05	0.08	0.11	0.12	0.21	0.29	0.08	0.08	0.05	3.46
MINNESOTA																
DULUTH																
241040001 A01	23	0.0	0.0	0.0	0.0	0.03	0.03	0.04	0.06	0.08	0.13	0.27				
MINNEAPOLIS																
242260001 A01	26	0.0	0.0	0.0	0.0	0.0	0.0	0.04	0.07	0.09	0.13	0.16				
MOORHEAD																
242320001 A01	26	0.0	NO. OF SAMPLES (17) BELOW MIN. DET. EXCEEDS 50%									0.14				
ST PAUL																
243300001 A01	26	0.0	0.0	0.0	0.0	0.02	0.02	0.03	0.05	0.08	0.12	0.23				
MISSISSIPPI																
JACKSON																
251260002 A01	26	0.0	0.0	0.0	0.0	0.02	0.02	0.04	0.05	0.10	0.17	0.30				
MISSOURI																
KANSAS CITY																
262380001 A01	24	0.0	NO. OF SAMPLES (18) BELOW MIN. DET. EXCEEDS 50%									0.26				
MONTANA																
HELENA																
270720001 A01	24	0.0	NO. OF SAMPLES (23) BELOW MIN. DET. EXCEEDS 50%									0.10				
NEBRASKA																
OMAHA																
281880001 A01	25	0.0	NO. OF SAMPLES (17) BELOW MIN. DET. EXCEEDS 50%									0.14				
NEVADA																
LAS VEGAS																
290320001 A01	24	0.0	NO. OF SAMPLES (24) BELOW MIN. DET. EXCEEDS 50%									0.0				
RENO																
290480001 A01	25	0.0	NO. OF SAMPLES (15) BELOW MIN. DET. EXCEEDS 50%									0.19				
NEW HAMPSHIRE																
CONCORD																
300120001 A01	25	0.0	NO. OF SAMPLES (21) BELOW MIN. DET. EXCEEDS 50%									0.04				
NEW JERSEY																
BAYONNE																
310180001 A01	21	0.0	NO. OF SAMPLES (15) BELOW MIN. DET. EXCEEDS 50%									0.06				
BURLINGTON CO																
310660002 A01	25	0.0	0.0	0.0	0.0	0.0	0.02	0.02	0.03	0.05	0.10	0.23				
CAMDEN																
310720001 A01	26	0.0	0.02	0.04	0.04	0.06	0.07	0.12	0.14	0.18	0.25	0.96	0.13	0.19	0.07	3.22
GLASSBORO																
311700001 A01	25	0.0	NO. OF SAMPLES (15) BELOW MIN. DET. EXCEEDS 50%									0.15				
HAMILTON																
311940001 A01	21	0.0	0.0	0.0	0.0	0.0	0.02	0.03	0.06	0.09	0.10	0.12				
JERSEY CITY																
312320001 A01	25	0.0	NO. OF SAMPLES (17) BELOW MIN. DET. EXCEEDS 50%									0.06				
NEWARK																
313480001 A01	24	0.0	0.0	0.0	0.0	0.0	0.02	0.02	0.03	0.05	0.07	0.09				
PATERSON																
314140001 A01	25	0.0	NO. OF SAMPLES (20) BELOW MIN. DET. EXCEEDS 50%									0.16				
PERTH AMBOY																
314220001 A01	26	0.0	0.0	0.0	0.0	0.0	0.0	0.02	0.03	0.04	0.07	0.10				
TRENTON																
315400001 A01	24	0.0	0.0	0.0	0.0	0.0	0.02	0.02	0.04	0.05	0.06	0.07				
NEW MEXICO																
ALBUQUERQUE																
320040001 A01	24	0.0	NO. OF SAMPLES (18) BELOW MIN. DET. EXCEEDS 50%									0.05				

Table 10-1 (continued). MANGANESE, URBAN FREQUENCY DISTRIBUTIONS, 1968

($\mu g/m^3$)

LOCATION	NO. SAMP.	MIN.	FREQUENCY DISTRIBUTION, %									MAX.	ARITHMETIC		GEOMETRIC	
			10	20	30	40	50	60	70	80	90		MEAN	STD. DEV.	MEAN	STD. DEV.
NORTH CAROLINA																
CHARLOTTE																
340700001 A01	25	0.0	0.0	0.0	0.0	0.02	0.03	0.03	0.05	0.10	0.13	0.41				
DURHAM																
341160001 A01	23	0.0	0.0	0.0	0.0	0.02	0.03	0.04	0.04	0.06	0.07	0.14				
NORTH DAKOTA																
BISMARCK																
350100001 A01	25	0.0	NO. OF SAMPLES (17) BELOW MIN. DET. EXCEEDS 50%									0.08				
OHIO																
AKRON																
360360001 A01	25	0.0	0.0	0.02	0.03	0.05	0.08	0.09	0.14	0.21	0.30	0.50	0.12	0.13	0.06	4.07
CINCINNATI																
361220001 A01	26	0.0	0.0	0.0	0.0	0.03	0.03	0.17	0.35	0.64	0.97	2.80				
CLEVELAND																
361300001 A01	26	0.03	0.05	0.08	0.11	0.13	0.15	0.16	0.17	0.28	0.49	0.69	0.20	0.17	0.14	2.26
COLUMBUS																
361460001 A01	24	0.0	0.0	0.0	0.0	0.0	0.0	0.02	0.03	0.06	0.07	0.12				
DAYTON																
361660001 A01	26	0.0	0.0	0.0	0.02	0.03	0.04	0.05	0.07	0.10	0.21	0.50				
TOLEDO																
366600001 A01	23	0.0	0.0	0.0	0.0	0.02	0.03	0.04	0.05	0.06	0.07	0.20				
YOUNGSTOWN																
367760001 A01	25	0.03	0.07	0.08	0.10	0.12	0.14	0.18	0.20	0.22	0.38	0.54	0.18	0.12	0.15	1.94
OKLAHOMA																
OKLAHOMA CITY																
372230001 A01	22	0.0	NO. OF SAMPLES (18) BELOW MIN. DET. EXCEEDS 50%									0.03				
TULSA																
373000001 A01	24	0.0	NO. OF SAMPLES (22) BELOW MIN. DET. EXCEEDS 50%									0.07				
OREGON																
MEDFORD																
381160001 A01	25	0.0	0.0	0.0	0.0	0.02	0.05	0.06	0.09	0.10	0.18	0.22				
PORTLAND																
381460001 A01	26	0.0	0.0	0.0	0.0	0.02	0.03	0.11	0.36	0.39	0.54	0.91				
PENNSYLVANIA																
ALLENTOWN																
390120001 A01	26	0.0	0.0	0.0	0.03	0.04	0.04	0.05	0.06	0.10	0.24	0.30	0.07	0.08	0.04	3.61
ALTOONA																
390140001 A01	23	0.0	0.0	0.0	0.0	0.0	0.02	0.03	0.05	0.06	0.08	0.12				
BETHLEHEM																
390780002 A01	24	0.0	0.0	0.04	0.05	0.06	0.08	0.16	0.18	0.37	0.43	0.59	0.17	0.18	0.09	4.10
HARRISBURG																
393880001 A01	26	0.0	0.0	0.0	0.02	0.02	0.03	0.04	0.05	0.09	0.16	0.54	0.06	0.11	0.03	3.56
HAZLETON																
393960001 A01	24	0.0	0.0	0.0	0.0	0.0	0.03	0.03	0.04	0.07	0.14	0.27				
JOHNSTOWN																
394460001 A01	23	0.33	0.38	0.62	0.95	1.70	2.10	2.70	3.70	4.20	8.40	14.00	3.27	3.46	1.93	3.01
PHILADELPHIA																
397140001 A01	26	0.0	0.04	0.06	0.07	0.08	0.09	0.11	0.16	0.23	0.56	2.60	0.32	0.68	0.12	3.58
PITTSBURGH																
397260001 A01	26	0.06	0.09	0.13	0.15	0.19	0.22	0.26	0.31	0.44	0.62	1.10	0.30	0.24	0.23	2.08
READING																
397620001 A01	25	0.0	0.05	0.09	0.19	0.20	0.31	0.35	0.45	0.63	0.86	2.10	0.43	0.45	0.23	4.15
SCRANTON																
398040001 A01	25	0.0	0.03	0.06	0.07	0.10	0.12	0.13	0.14	0.20	0.32	0.50	0.15	0.13	0.09	3.10
WARMINSTER																
399160001 A01	25	0.0	0.0	0.0	0.03	0.03	0.04	0.05	0.08	0.12	0.19	0.21	0.07	0.07	0.04	3.70
WEST CHESTER																
399280001 A01	24	0.0	0.0	0.0	0.02	0.02	0.03	0.03	0.04	0.05	0.07	0.29				
WILKES-BARRE																
399430001 A01	24	0.0	NO. OF SAMPLES (17) BELOW MIN. DET. EXCEEDS 50%									0.09				
YORK																
399560001 A01	25	0.0	0.0	0.0	0.0	0.0	0.02	0.03	0.05	0.06	0.13	0.15				
PUERTO RICO																
BAYAMON																
400380001 A01	25	0.0	NO. OF SAMPLES (13) BELOW MIN. DET. EXCEEDS 50%									0.16				
CATANO																
400560001 A01	25	0.0	NO. OF SAMPLES (18 BELOW MIN. DET. EXCEEDS 50%									0.07				

Table 10-1 (continued). MANGANESE, URBAN FREQUENCY DISTRIBUTIONS, 1968

($\mu g/m^3$)

LOCATION	NO. SAMP.	MIN.	FREQUENCY DISTRIBUTION, %									MAX.	ARITHMETIC MEAN	ARITHMETIC STD. DEV.	GEOMETRIC MEAN	GEOMETRIC STD. DEV.
			10	20	30	40	50	60	70	80	90					
PUERTO RICO																
GUAYANILLA																
401080001 A01	25	0.0	NO. OF SAMPLES (22) BELOW MIN. DET. EXCEEDS 50%									0.04				
PONCE																
401920001 A01	25	0.0	NO. OF SAMPLES (19) BELOW MIN. DET. EXCEEDS 50%									0.05				
RHODE ISLAND																
EAST PROVIDENCE																
410120001 A01	26	0.0	NO. OF SAMPLES (20) BELOW MIN. DET. EXCEEDS 50%									0.04				
PROVIDENCE																
410300001 A01	25	0.0	NO. OF SAMPLES (15) BELOW MIN. DET. EXCEEDS 50%									0.11				
SOUTH CAROLINA																
COLUMBIA																
420760001 A01	24	0.0	NO. OF SAMPLES (18) BELOW MIN. DET. EXCEEDS 50%									0.10				
GREENVILLE																
421190001 A01	25	0.0	NO. OF SAMPLES (20) BELOW MIN. DET. EXCEEDS 50%									0.08				
SOUTH DAKOTA																
SIOUX FALLS																
431440001 A01	22	0.0	0.0	0.0	0.0	0.0	0.02	0.02	0.04	0.06	0.09	0.59				
TENNESSEE																
CHATTANOOGA																
440380001 A01	25	0.0	0.0	0.02	0.06	0.08	0.17	0.20	0.29	0.41	0.53	0.66	0.22	0.21	0.10	4.98
KNOXVILLE																
441740001 A01	26	0.0	0.0	0.03	0.06	0.08	0.15	0.21	0.25	0.36	0.66	3.10	0.33	0.63	0.10	6.09
MEMPHIS																
442340001 A01	25	0.0	0.0	0.0	0.0	0.0	0.02	0.03	0.06	0.09	0.39	1.20				
NASHVILLE																
442540001 A01	25	0.0	0.0	0.0	0.0	0.0	0.02	0.04	0.05	0.05	0.11	0.15				
TEXAS																
DALLAS																
451310002 A01	26	0.0	NO. OF SAMPLES (16) BELOW MIN. DET. EXCEEDS 50%									0.08				
HOUSTON																
452560001 A01	26	0.0	NO. OF SAMPLES (16) BELOW MIN. DET. EXCEEDS 50%									0.76				
PASADENA																
454040001 A01	26	0.0	NO. OF SAMPLES (15) BELOW MIN. DET. EXCEEDS 50%									6.60				
SAN ANTONIO																
454570001 A01	25	0.0	NO. OF SAMPLES (23) BELOW MIN. DET. EXCEEDS 50%									0.03				
UTAH																
OGDEN																
460680001 A01	25	0.0	NO. OF SAMPLES (24) BELOW MIN. DET. EXCEEDS 50%									0.02				
SALT LAKE CITY																
460920001 A01	26	0.0	NO. OF SAMPLES (19) BELOW MIN. DET. EXCEEDS 50%									0.13				
VERMONT																
BURLINGTON																
470140001 A01	24	0.0	NO. OF SAMPLES (18) BELOW MIN. DET. EXCEEDS 50%									0.04				
VIRGINIA																
DANVILLE																
480920001 A01	25	0.0	NO. OF SAMPLES (17) BELOW MIN. DET. EXCEEDS 50%									0.21				
HAMPTON																
481440001 A01	25	0.0	NO. OF SAMPLES (17) BELOW MIN. DET. EXCEEDS 50%									0.19				
LYNCHBURG																
481840001 A01	26	0.02	0.04	0.09	0.13	0.21	0.26	0.39	0.52	0.64	1.10	1.40	0.42	0.40	0.24	3.24
NORFOLK																
482140001 A01	26	0.0	NO. OF SAMPLES (18) BELOW MIN. DET. EXCEEDS 50%									0.07				
PORTSMOUTH																
482440001 A01	26	0.0	NO. OF SAMPLES (14) BELOW MIN. DET. EXCEEDS 50%									0.20				
RICHMOND																
482660001 A01	26	0.0	NO. OF SAMPLES (25) BELOW MIN. DET. EXCEEDS 50%									0.07				
ROANOKE																
482700001 A01	25	0.0	0.0	0.0	0.0	0.04	0.07	0.08	0.12	0.18	0.24	0.31				
WASHINGTON																
SEATTLE																
491840001 A01	26	0.0	NO. OF SAMPLES (19) BELOW MIN. DET. EXCEEDS 50%									0.10				
WEST VIRGINIA																
CHARLESTON																
500280001 A01	26	0.0	0.0	0.0	0.03	0.06	0.08	0.23	0.89	1.30	3.20	8.70				
WISCONSIN																
EAU CLAIRE																
510840001 A01	24	0.0	NO. OF SAMPLES (17) BELOW MIN. DET. EXCEEDS 50%									0.05				

Table 10-1 (continued). MANGANESE, URBAN FREQUENCY DISTRIBUTIONS, 1968

($\mu g/m^3$)

LOCATION	NO. SAMP.	MIN.	FREQUENCY DISTRIBUTION, %									MAX.	ARITHMETIC		GEOMETRIC	
			10	20	30	40	50	60	70	80	90		MEAN	STD. DEV.	MEAN	STD. DEV.
WISCONSIN																
KENOSHA																
511540001 A01	25	0.0	NO. OF SAMPLES (16) BELOW MIN. DET. EXCEEDS 50%									0.12				
MADISON																
511860001 A01	25	0.0	NO. OF SAMPLES (15) BELOW MIN. DET. EXCEEDS 50%									0.13				
MILWAUKEE																
512200001 A01	25	0.0	0.0	0.0	0.03	0.05	0.07	0.09	0.14	0.17	0.47	0.57				
SUPERIOR																
513480001 A01	25	0.0	0.0	0.0	0.03	0.04	0.04	0.05	0.05	0.11	0.20	0.22	0.06	0.07	0.04	3.41
WYOMING																
CASPER																
520120001 A01	26	0.0	NO. OF SAMPLES (26) BELOW MIN. DET. EXCEEDS 50%									0.07				
CHEYENNE																
520140001 A01	26	0.0	NO. OF SAMPLES (26) BELOW MIN. DET. EXCEEDS 50%									0.0				

Table 10-2. MANGANESE, NONURBAN FREQUENCY DISTRIBUTIONS, 1968

($\mu g/m^3$)

LOCATION	NO. SAMP.	MIN.	FREQUENCY DISTRIBUTION, %									MAX.	ARITHMETIC MEAN	ARITHMETIC STD. DEV.	GEOMETRIC MEAN	GEOMETRIC STD. DEV.
			10	20	30	40	50	60	70	80	90					
ARIZONA																
GRAND CANYON NAT PI																
030370001 A03	25	0.0	NO. OF SAMPLES (25) BELOW MIN. DET. EXCEEDS 50%									0.0				
ARKANSAS																
MONTGOMERY CO																
041760001 A03	25	0.0	NO. OF SAMPLES (25) BELOW MIN. DET. EXCEEDS 50%									0.0				
CALIFORNIA																
HUMBOLDT CO																
053300001 A03	26	0.0	NO. OF SAMPLES (26) BELOW MIN. DET. EXCEEDS 50%									0.0				
COLORADO																
MESA VERDE NAT PAR																
061530002 A03	21	0.0	NO. OF SAMPLES (21) BELOW MIN. DET. EXCEEDS 50%									0.0				
DELAWARE																
KENT CO																
080060001 A03	24	0.0	NO. OF SAMPLES (23) BELOW MIN. DET. EXCEEDS 50%									0.036				
IDAHO																
BUTTE CO																
130340001 A03	24	0.0	NO. OF SAMPLES (23) BELOW MIN. DET. EXCEEDS 50%									0.140				
INDIANA																
MONROE CO																
152800001 A03	24	0.0	NO. OF SAMPLES (23) BELOW MIN. DET. EXCEEDS 50%									0.038				
PARKE CO																
153260001 A03	25	0.0	NO. OF SAMPLES (24) BELOW MIN. DET. EXCEEDS 50%									0.080				
MAINE																
ACADIA NAT PARK																
200010001 A03	26	0.0	NO. OF SAMPLES (26) BELOW MIN. DET. EXCEEDS 50%									0.0				
MARYLAND																
CALVERT CO																
210280001 A03	23	0.0	NO. OF SAMPLES (20) BELOW MIN. DET. EXCEEDS 50%									0.032				
MISSISSIPPI																
JACKSON CO																
251280001 A03	24	0.0	NO. OF SAMPLES (24) BELOW MIN. DET. EXCEEDS 50%									0.0				
MISSOURI																
SHANNON CO																
264480031 A03	25	0.0	NO. OF SAMPLES (23) BELOW MIN. DET. EXCEEDS 50%									0.037				
MONTANA																
GLACIER NAT PARK																
270570001 A03	25	0.0	NO. OF SAMPLES (25) BELOW MIN. DET. EXCEEDS 50%									0.0				
NEBRASKA																
THOMAS CO																
282480001 A03	24	0.0	NO. OF SAMPLES (24) BELOW MIN. DET. EXCEEDS 50%									0.0				
NEVADA																
WHITE PINE CO																
290560001 A03	26	0.0	NO. OF SAMPLES (26) BELOW MIN. DET. EXCEEDS 50%									0.0				
NEW HAMPSHIRE																
COOS CO																
300140001 A03	23	0.0	NO. OF SAMPLES (23) BELOW MIN. DET. EXCEEDS 50%									0.0				
NEW YORK																
JEFFERSON CO																
333340001 A03	26	0.0	NO. OF SAMPLES (19) BELOW MIN. DET. EXCEEDS 50%									0.140				
NORTH CAROLINA																
CAPE HATTERAS NAT																
340590001 A03	25	0.0	NO. OF SAMPLES (25) BELOW MIN. DET. EXCEEDS 50%									0.0				
OKLAHOMA																
CHEROKEE CO																
370480001 A03	25	0.0	NO. OF SAMPLES (24) BELOW MIN. DET. EXCEEDS 50%									0.016				
OREGON																
CURRY CO																
380440001 A03	26	0.0	NO. OF SAMPLES (26) BELOW MIN. DET. EXCEEDS 50%									0.0				
PENNSYLVANIA																
CLARION CO																
391760001 A03	26	0.0	NO. OF SAMPLES (17) BELOW MIN. DET. EXCEEDS 50%									0.140				
RHODE ISLAND																
WASHINGTON CO																
410380001 A03	26	0.0	NO. OF SAMPLES (23) BELOW MIN. DET. EXCEEDS 50%									0.047				
SOUTH CAROLINA																
RICHLAND CO																
421900001 A03	23	0.0	NO. OF SAMPLES (22) BELOW MIN. DET. EXCEEDS 50%									0.025				
SOUTH DAKOTA																
BLACK HILLS NAT FO																
430110001 A03	26	0.0	NO. OF SAMPLES (26) BELOW MIN. DET. EXCEEDS 50%									0.0				

Table 10-2 (continued). MANGANESE, NONURBAN FREQUENCY DISTRIBUTIONS, 1968

($\mu g/m^3$)

LOCATION	NO. SAMP.	MIN.	FREQUENCY DISTRIBUTION, %									MAX.	ARITHMETIC		GEOMETRIC	
			10	20	30	40	50	60	70	80	90		MEAN	STD. DEV.	MEAN	STD. DEV.
TEXAS																
MATAGORDA CO 453530001 A03	25	10.0	NO. OF SAMPLES (25) BELOW MIN. DET. EXCEEDS 50%									10.0				
VERMONT																
ORANGE CO 470360001 A03	26	10.0	NO. OF SAMPLES (25) BELOW MIN. DET. EXCEEDS 50%									10.018				
VIRGINIA																
SHENANDOAH NAT PAR 482890001 A03	26	10.0	NO. OF SAMPLES (26) BELOW MIN. DET. EXCEEDS 50%									10.0				
WYOMING																
YELLOWSTONE NAT PA 520860001 A03	26	10.0	NO. OF SAMPLES (26) BELOW MIN. DET. EXCEEDS 50%									10.0				

Table 10-3. MANGANESE, URBAN QUARTERLY COMPOSITES AND YEARLY AVERAGES, 1969

($\mu g/m^3$)

LOCATION	1ST QTR.	2ND QTR.	3RD QTR.	4TH QTR.	YR. AVG.
ALABAMA					
GADSDEN					
011490001 A01	0.07	0.06	0.0	0.06	0.05
HUNTSVILLE					
011860001 A01	0.03	0.03	0.02	0.02	0.03
MOBILE					
012380001 A01	0.07	0.04	0.13	0.05	0.07
MONTGOMERY					
012460001 A01	0.02	0.04	0.03	0.04	0.03
ALASKA					
ANCHORAGE					
020040003 A01	0.03	0.03	0.09	0.06	0.06
FAIRBANKS					
020160001 A01	0.0	0.06	0.10	0.03	0.05
ARIZONA					
MARICOPA CO					
030440001 A01	0.0	0.02	0.01	0.02	0.01
PHOENIX					
030600002 A01	0.03	0.05	0.05	0.09	0.05
TUCSON					
030860001 A01	0.02	0.04	0.02	0.03	0.03
ARKANSAS					
LITTLE ROCK					
041440001 A01	0.03	0.03	0.03	0.04	0.03
TEXARKANA					
042560001 A01	0.0	0.0	0.02	0.03	*****
WEST MEMPHIS					
042740001 A01	0.07	0.04	0.07	0.07	0.06
CALIFORNIA					
ANAHEIM					
050230001 A01	0.02	0.02	0.03	0.04	0.03
BURBANK					
050900001 A01	0.0	0.02	0.02	0.02	0.02
FRESNO					
052800001 A01	0.0	0.01	0.03	0.04	0.02
GLENDALE					
052940001 A01	0.0	0.01	0.02	0.01	0.01
LONG BEACH					
054100001 A01	0.03	0.01	0.02	0.04	0.03
LOS ANGELES					
054180001 A01	0.03	0.03	0.03	0.02	0.03
OAKLAND					
055300001 A01	0.03	0.04	0.05	0.05	0.04
ONTARIO					
055380001 A01	0.03	0.07	0.10	0.09	0.07
RIVERSIDE					
056400001 A01	0.05	0.05	0.04	0.06	0.06
SACRAMENTO					
055580001 A01	0.0	0.02	0.01	0.02	0.01
SAN BERNARDINO					
056680001 A01	0.03	0.04	0.08	0.05	0.05
SAN DIEGO					
056820001 A01	0.01	0.0	0.01	0.02	0.01
SAN FRANCISCO					
056860001 A01	0.0	0.0	0.0	0.02	*****
SAN JOSE					
056980001 A01	0.02	0.02	0.03	0.04	0.03
SANTA ANA					
057180001 A01	0.02	0.02	0.04	0.05	0.03
TORRANCE					
058260001 A01	0.03	0.02	0.0	0.04	0.02
COLORADO					
DENVER					
060580001 A01	0.05	0.03	0.04	0.10	0.06

LOCATION	1ST QTR.	2ND QTR.	3RD QTR.	4TH QTR.	YR. AVG.
COLORADO (CONT)					
MONTEZUMA CO					
061600002 A01	0.0	0.0	0.0	0.0	*****
CONNECTICUT					
BRIDGEPORT					
070060001 A01	0.02	0.02	0.01	0.03	0.02
HARTFORD					
070420001 A01	0.03	0.04	0.02	0.03	0.03
NEW HAVEN					
070700001 A01	0.02	0.02	0.02	0.03	0.02
WATERBURY					
071240001 A01	0.03	0.03	0.02	0.02	0.02
DELAWARE					
WILMINGTON					
080260003 A01	0.06	0.04	0.08	0.03	0.05
DIST COLUMBIA					
WASHINGTON					
090020001 A01	0.04	0.04	0.03	0.03	0.03
FLORIDA					
JACKSONVILLE					
101960002 A01	0.04	0.03	0.01	0.0	0.02
MIAMI					
102700001 A01	0.0	0.01	0.01	0.02	0.01
ST PETERSBURG					
103980002 A01	0.02	0.0	0.0	0.0	*****
TAMPA					
104360002 A01	0.06	0.03	0.03	0.04	0.04
GEORGIA					
ATLANTA					
110200001 A01	0.06	0.05	0.04	0.08	0.06
COLUMBUS					
111280001 A01	0.04	0.03	0.02	0.05	0.03
SAVANNAH					
114500001 A01	0.05	0.02	0.01	0.03	0.03
HAWAII					
HONOLULU					
120120001 A01	0.01	0.01	0.0	0.0	*****
IDAHO					
BOISE CITY					
130220001 A01	0.02	0.02	0.05	0.03	0.03
ILLINOIS					
CHICAGO					
141220001 A01	0.15	0.14	0.07	0.13	0.12
EAST ST LOUIS					
142100001 A01	0.10	0.06	0.06	0.06	0.07
JOLIET					
143760001 A01	0.06	0.15	0.12	0.12	0.11
NORTH CHICAGO					
145620002 A01	0.12	0.11	0.07	0.02	0.08
PEORIA					
146080001 A01	0.09	0.13	0.13	0.08	0.10
ROCKFORD					
146480001 A01	0.18	0.34	0.09	0.08	0.17
SPRINGFIELD					
147280001 A01	0.04	0.04	0.07	0.04	0.05
INDIANA					
EAST CHICAGO					
151180001 A01	0.28	0.42	0.40	0.29	0.35
EVANSVILLE					
151300001 A01	0.09	0.05	0.07	0.04	0.06
FORT WAYNE					
151380001 A01	0.05	0.04	0.04	0.05	0.05
GARY					
151520001 A01	0.15	0.23	0.28	0.29	0.24

Table 10-3 (continued). MANGANESE, URBAN QUARTERLY COMPOSITES AND YEARLY AVERAGES, 1969

($\mu g/m^3$)

LOCATION	1ST QTR.	2ND QTR.	3RD QTR.	4TH QTR.	YR. AVG.
INDIANA					
HAMMOND					
151780001 A01	0.17	0.33	0.26	0.21	0.24
INDIANAPOLIS					
152040001 A01	0.07	0.08	0.07	0.08	0.08
NEW ALBANY					
152980001 A01	0.07	0.06	0.08	0.04	0.06
SOUTH BEND					
153980001 A01	0.05	0.10	0.06	0.06	0.06
TERRE HAUTE					
154080001 A01	0.06	0.05	0.04	0.04	0.05
IOWA					
DAVENPORT					
161060001 A01	0.22	0.15	0.10	0.14	0.16
DES MOINES					
161180001 A01	0.04	0.08	0.04	0.07	0.06
DUBUQUE					
161260001 A01	0.06	0.09	0.06	0.07	0.07
KANSAS					
KANSAS CITY					
171980001 A01	0.07	0.08	0.05	0.12	0.07
TOPEKA					
173540001 A01	0.02	0.03	0.02	0.03	0.02
WICHITA					
173740001 A01	0.05	0.02	0.03	0.04	0.04
KENTUCKY					
ASHLAND					
180800002 A01	0.35	0.20	0.33	0.20	0.32
COVINGTON					
180980001 A01	0.14	0.41	0.43	0.31	0.32
LOUISVILLE					
182380001 A01	0.13	0.11	0.08	0.06	0.09
LOUISIANA					
BATON ROUGE					
190340001 A01	0.02	0.03	0.02	0.02	0.02
NEW ORLEANS					
192020002 A01	0.06	0.03	0.03	0.07	0.03
SHREVEPORT					
192740001 A01	0.05	0.10	0.12	0.05	0.08
MARYLAND					
BALTIMORE					
210120001 A01	0.13	0.10	0.07	0.07	0.11
MASSACHUSETTS					
BOSTON					
220340001 A01	0.0	0.02	0.02	0.01	0.01
FALL RIVER					
221540002 A01	0.02	0.01	0.01	0.02	0.02
SPRINGFIELD					
222160001 A01	0.03	0.02	0.01	0.08	0.04
WORCHESTER					
222640001 A01	0.10	0.05	0.03	0.04	0.06
MICHIGAN					
DEARBORN					
233140001 A01	0.16	0.16	0.23	0.11	0.16
DETROIT					
233180001 A01	0.13	0.23	0.17	0.12	0.16
FLINT					
233580001 A01	0.13	0.11	0.07	0.07	0.09
GRAND RAPIDS					
233820001 A01	0.18	0.14	0.05	0.06	0.09
LANSING					
232840001 A01	0.05	0.10	0.05	0.03	0.06
SAGINAW					
234760001 A01	0.08	0.05	0.04	0.05	0.05

LOCATION	1ST QTR.	2ND QTR.	3RD QTR.	4TH QTR.	YR. AVG.
MICHIGAN (CONT)					
TRENTON					
235120001 A01	0.11	0.11	0.07	0.10	0.10
MINNESOTA					
DULUTH					
241040001 A01	0.03	0.00	0.10	0.02	0.04
MINNEAPOLIS					
242260001 A01	0.03	0.06	0.04	0.07	0.05
ST PAUL					
243300001 A01	0.04	0.07	0.05	0.04	0.05
MISSOURI					
KANSAS CITY					
262380001 A01	0.07	0.03	0.05	0.08	0.06
ST LOUIS					
264280001 A01	0.08	0.16	0.15	0.21	0.14
MONTANA					
HELENA					
270720001 A01	0.01	0.0	0.03	0.02	0.02
NEBRASKA					
OMAHA					
281880001 A01	0.03	0.05	0.04	0.03	0.04
NEVADA					
LAS VEGAS					
290320001 A01	0.03	0.01	0.03	0.04	0.03
RENO					
290480001 A01	0.04	0.03	0.08	0.14	0.08
NEW HAMPSHIRE					
CONCORD					
300120001 A01	0.0	0.0	0.0	0.0	*****
NEW JERSEY					
BURLINGTON CO					
310460002 A01	0.06	0.04	0.03	0.02	0.04
ELIZABETH					
311390001 A01	0.03	0.03	0.03	0.02	0.03
GLASSBORO					
311700001 A01	0.05	0.04	0.05	0.03	0.05
HAMILTON					
311940001 A01	0.03	0.05	0.04	0.10	0.05
JERSEY CITY					
312330001 A01	0.03	0.03	0.03	0.03	0.03
NEWARK					
313480001 A01	0.03	0.03	0.03	0.03	0.03
PATERSON					
314140001 A01	0.03	0.02	0.03	0.03	0.03
PERTH AMBOY					
314220001 A01	0.02	0.03	0.04	0.04	0.03
TRENTON					
315400001 A01	0.05	0.08	0.07	0.04	0.06
NEW MEXICO					
ALBUQUERQUE					
320060001 A01	0.02	0.03	0.03	0.05	0.04
NEW YORK					
ALBANY					
330040001 A01	0.03	0.03	0.03	0.02	0.03
BUFFALO					
330440001 A01	0.45	0.13	0.21	0.17	0.24
NEW YORK CITY					
334480001 A01	0.06	0.05	0.01	0.03	0.04
NIAGARA FALLS					
334740001 A01	0.40	1.30	0.87	0.07	0.66
ROCHESTER					
335760001 A01	0.12	0.03	0.11	0.09	0.09
SYRACUSE					
336720001 A01	0.16	0.05	0.09	0.08	0.09

Table 10-3 (continued). MANGANESE, URBAN QUARTERLY COMPOSITES AND YEARLY AVERAGES, 1969

($\mu g/m^3$)

LOCATION	1ST QTR.	2ND QTR.	3RD QTR.	4TH QTR.	YR. AVG.
NEW YORK					
UTICA					
336480001 A01	0.04	0.04	0.04	0.04	0.04
NORTH CAROLINA					
CHARLOTTE					
340700001 A01	0.10	0.03	0.04	0.05	0.06
DURHAM					
341140001 A01	0.03	0.03	0.02	0.02	0.03
GREENSBORO					
341740002 A01	0.05	0.05	0.03	0.06	0.05
WINSTON-SALEM					
344660002 A01	0.04	0.04	0.03	0.05	0.04
NORTH DAKOTA					
BISMARCK					
350100001 A01	0.01	0.05	0.06	0.04	0.04
OHIO					
AKRON					
360060001 A01	0.11	0.14	0.12	0.14	0.13
CANTON					
361000001 A01	0.13	0.21	0.17	0.13	0.16
CINCINNATI					
361220001 A01	0.21	0.42	0.41	0.19	0.35
CLEVELAND					
361300001 A01	0.22	0.33	0.15	0.11	0.20
COLUMBUS					
361480001 A01	0.14	0.08	0.14	0.07	0.11
DAYTON					
361660001 A01	0.08	0.09	0.06	0.10	0.08
TOLEDO					
366600001 A01	0.05	0.07	0.03	0.06	0.05
YOUNGSTOWN					
367760001 A01	0.28	0.25	0.23	0.15	0.23
OKLAHOMA					
OKLAHOMA CITY					
372220001 A01	0.0	0.0	0.02	0.02	*****
TULSA					
373000001 A01	0.03	0.04	0.02	0.11	0.05
OREGON					
MEDFORD					
381140001 A01	0.07	0.07	0.08	0.12	0.09
PORTLAND					
381460001 A01	0.13	0.16	0.06	0.08	0.11
PENNSYLVANIA					
ALLENTOWN					
390120001 A01	0.08	0.12	0.05	0.08	0.08
BETHLEHEM					
390780002 A01	0.15	0.17	0.15	0.10	0.14
ERIE					
393060002 A01	0.05	0.21	0.23	0.08	0.14
HARRISBURG					
393480001 A01	0.04	0.06	0.04	0.02	0.04
HAZLETON					
393540001 A01	0.05	0.07	0.01	0.0	0.07
JOHNSTOWN					
394660001 A01	1.90	1.80	1.30	2.10	1.77
PHILADELPHIA					
397140001 A01	0.18	0.41	1.30	0.12	0.50
PITTSBURGH					
397260001 A01	0.38	0.32	0.35	0.17	0.30
READING					
397420001 A01	0.16	0.03	0.17	0.16	0.13
SCRANTON					
398040001 A01	0.15	0.14	0.08	0.08	0.11
WARMINSTER					
399160001 A01	0.04	0.04	0.03	0.03	0.04

LOCATION	1ST QTR.	2ND QTR.	3RD QTR.	4TH QTR.	YR. AVG.
397880001 (CINY)					
WEST CHESTER					
399280001 A01	0.03	0.05	0.05	0.05	0.06
WILKES-BARRE					
399430001 A01	0.04	0.05	0.05	0.03	0.05
YORK					
399560001 A01	0.05	0.06	0.05	0.09	0.06
PUERTO RICO					
BAYAMON					
400380001 A01	0.06	0.06	0.03	0.08	0.06
CATANO					
400660002 A01	0.05	0.04	0.05	0.04	0.05
GUAYANILLA					
401080001 A01	0.0	0.0	0.0	0.0	*****
PONCE					
401820001 A01	0.02	0.02	0.03	0.04	0.03
SAN JUAN					
402140001 A01	0.02	0.02	0.02	0.02	0.02
RHODE ISLAND					
EAST PROVIDENCE					
410120001 A01	0.03	0.03	0.02	0.03	0.03
PROVIDENCE					
410380001 A01	0.02	0.02	0.02	0.02	0.02
SOUTH CAROLINA					
COLUMBIA					
420760001 A01	0.0	0.01	0.01	0.0	*****
GREENVILLE					
421140001 A01	0.03	0.03	0.02	0.03	0.03
TENNESSEE					
CHATTANOOGA					
443380001 A01	0.20	0.26	0.11	0.25	0.20
KNOXVILLE					
441740001 A01	0.11	0.51	0.14	0.32	0.27
MEMPHIS					
442360001 A01	0.09	0.08	0.23	0.31	0.18
NASHVILLE					
442540001 A01	0.07	0.07	0.04	0.06	0.07
TEXAS					
DALLAS					
451310002 A01	0.02	0.01	0.03	0.04	0.03
EL PASO					
451720001 A01	0.17	0.18	0.13	0.13	0.16
FORT WORTH					
451880001 A01	0.03	0.05	0.03	0.04	0.04
HOUSTON					
452560001 A01	0.09	0.11	0.11	0.05	0.09
PASADENA					
456360001 A01	0.02	0.09	0.10	0.07	0.07
SAN ANTONIO					
456570001 A01	0.0	0.0	0.01	0.02	*****
UTAH					
OGDEN					
462680001 A01	0.03	0.03	0.03	0.03	0.03
SALT LAKE CITY					
462930001 A01	0.03	0.0	0.03	0.04	0.02
VERMONT					
BURLINGTON					
470140001 A01	0.02	0.03	0.02	0.02	0.02
VIRGINIA					
DANVILLE					
483920001 A01	0.03	0.03	0.03	0.03	0.03
HAMPTON					
481460001 A01	0.02	0.07	0.04	0.04	0.04

Table 10-3 (continued). MANGANESE, URBAN QUARTERLY COMPOSITES AND YEARLY AVERAGES, 1969

($\mu g/m^3$)

LOCATION	1ST QTR.	2ND QTR.	3RD QTR.	4TH QTR.	YR. AVG.
VIRGINIA					
LYNCHBURG					
48184000I A01	0.12	0.38	0.26	0.21	0.24
NEWPORT NEWS					
48212000I A01	0.10	0.08	0.09	0.17	0.10
NORFOLK					
48274000I A01	0.03	0.04	0.03	0.03	0.03
PORTSMOUTH					
48244000I A01	0.05	0.04	0.05	0.07	0.05
RICHMOND					
48266000I A01	0.04	0.07	0.02	0.03	0.03
ROANOKE					
48278000I A01	0.06	0.20	0.17	0.10	0.13
WASHINGTON					
SEATTLE					
49146000I A01	0.03	0.02	0.02	0.09	0.04
SPOKANE					
49204000I A01	0.01	0.02	0.06	0.03	0.03
TACOMA					
49214000I A01	0.04	0.04	0.03	0.08	0.05

LOCATION	1ST QTR.	2ND QTR.	3RD QTR.	4TH QTR.	YR. AVG.
WEST VIRGINIA					
CHARLESTON					
50078000I A01	0.16	0.48	0.15	0.08	0.22
WISCONSIN					
EAU CLAIRE					
51084000I A01	0.02	0.02	0.07	0.02	0.03
KENOSHA					
51154000I A01	0.06	0.13	0.08	0.08	0.08
MADISON					
51186000I A01	0.05	0.05	0.03	0.02	0.04
MILWAUKEE					
51220000I A01	0.06	0.20	0.16	0.09	0.13
RACINE					
51248000I A01	0.11	0.07	0.17	0.06	0.10
SUPERIOR					
51348000I A01	0.06	0.11	0.08	0.06	0.08
WYOMING					
CASPER					
52012000I A01	0.0	0.0	0.0	0.0	*****
CHEYENNE					
52014000I A01	0.0	0.0	0.01	0.0	*****

Table 10-4. MANGANESE, NONURBAN QUARTERLY COMPOSITES AND YEARLY AVERAGES, 1969

($\mu g/m^3$)

LOCATION	1ST QTR.	2ND QTR.	3RD QTR.	4TH QTR.	YR. AVG.
ARIZONA					
GRAND CANYON NAT PA					
020370001 A03	0.0	0.0	0.0	0.0	*****
ARKANSAS					
MONTGOMERY CO					
041760001 A03	0.020	0.019	0.012	0.0	0.013
CALIFORNIA					
HUMBOLDT CO					
053300001 A03	0.0	0.0	0.0	0.0	*****
FLORIDA					
HARDEE CO					
101680001 A03	0.0	0.0	0.0	0.0	*****
IDAHO					
BUTTE CO					
130340001 A03	0.0	0.0	0.0	0.0	*****
INDIANA					
MONROE CO					
152800001 A03	0.029	0.020	0.022	0.031	0.025
PARKE CO					
163260001 A03	0.031	0.018	0.024	0.028	0.025
MAINE					
ACADIA NAT PARK					
200010001 A03	0.0	0.0	0.0	0.0	*****
MARYLAND					
CALVERT CO					
210280001 A03	0.021	0.033	0.014	0.0	0.017
MISSOURI					
SHANNON CO					
264480002 A03	0.0	0.0	0.029	0.010	*****
MONTANA					
GLACIER NAT PARK					
270570001 A03	0.0	0.0	0.0	0.0	*****
NEBRASKA					
THOMAS CO					
282480001 A03	0.0	0.015	0.020	0.0	*****
NEVADA					
WHITE PINE CO					
295560001 A03	0.0	0.0	0.0	0.0	*****
NEW HAMPSHIRE					
COOS CO					
300140001 A03	0.0	0.0	0.0	0.0	*****
NEW YORK					
JEFFERSON CO					
333340001 A03	0.0	0.043	0.035	0.017	0.024

LOCATION	1ST QTR.	2ND QTR.	3RD QTR.	4TH QTR.	YR. AVG.
NORTH CAROLINA					
CAPE HATTERAS NAT					
340530001 A03	0.016	0.0	0.019	0.021	0.014
OKLAHOMA					
CHEROKEE CO					
370480001 A03	0.020	0.014	0.012	0.016	0.015
OREGON					
CURRY CO					
380440001 A03	0.0	0.0	0.0	0.0	*****
PENNSYLVANIA					
CLARION CO					
391760001 A03	0.061	0.053	0.045	0.046	0.051
RHODE ISLAND					
WASHINGTON CO					
410380002 A03	0.022	0.0	0.0	0.024	*****
SOUTH CAROLINA					
RICHLAND CO					
421900001 A03	0.016	0.021	0.0	0.018	0.014
SOUTH DAKOTA					
BLACK HILLS NAT FO					
430110001 A03	0.0	0.0	0.0	0.0	*****
TENNESSEE					
CUMBERLAND CO					
440680001 A03	0.036	0.120	0.050	0.055	0.065
TEXAS					
MATAGORDA CO					
453530001 A03	0.018	0.014	0.014	0.030	0.019
VERMONT					
ORANGE CO					
470360001 A03	0.0	0.020	0.024	0.013	0.015
VIRGINIA					
SHENANDOAH NAT PAR					
482830001 A03	0.051	0.030	0.024	0.023	0.032
WYTHE CO					
483440001 A03	0.031	0.033	0.0	0.030	0.024
WISCONSIN					
DOOR CO					
510780001 A03	0.0	0.0	0.0	0.0	*****
WYOMING					
YELLOWSTONE NAT PA					
520860001 A03	0.0	0.0	0.0	0.0	*****

SECTION 11. URBAN AND NONURBAN METALS IN SUSPENDED PARTICULATES: NICKEL

Table 11-1. NICKEL, URBAN FREQUENCY DISTRIBUTIONS, 1968

($\mu g/m^3$)

LOCATION	NO. SAMP.	MIN.	FREQUENCY DISTRIBUTION, %									MAX.	ARITHMETIC MEAN	ARITHMETIC STD. DEV.	GEOMETRIC MEAN	GEOMETRIC STD. DEV.
			10	20	30	40	50	60	70	80	90					
ALABAMA																
GADSDEN																
01148001 A01	25	0.0	NO. OF SAMPLES (18) BELOW MIN. DET. EXCEEDS 50%									0.130				
HUNTSVILLE #																
01196001 A01	26	0.0	NO. OF SAMPLES (23) BELOW MIN. DET. EXCEEDS 50%									0.056				
MOBILE																
01238001 A01	25	0.0	NO. OF SAMPLES (14) BELOW MIN. DET. EXCEEDS 50%									0.049				
MONTGOMERY																
01246001 A01	26	0.0	NO. OF SAMPLES (24) BELOW MIN. DET. EXCEEDS 50%									0.015				
ALASKA																
ANCHORAGE																
02004003 A01	26	0.0	NO. OF SAMPLES (17) BELOW MIN. DET. EXCEEDS 50%									0.043				
FAIRBANKS																
02016001 A01	23	0.0	0.0	0.0	0.0	0.0	0.007	0.008	0.009	0.016	0.027	0.070				
ARIZONA																
MARICOPA CO																
03044001 A01	25	0.0	NO. OF SAMPLES (20) BELOW MIN. DET. EXCEEDS 50%									0.032				
PHOENIX																
03060002 A01	26	0.0	NO. OF SAMPLES (15) BELOW MIN. DET. EXCEEDS 50%									0.033				
TUCSON																
03086001 A01	26	0.0	NO. OF SAMPLES (25) BELOW MIN. DET. EXCEEDS 50%									0.007				
ARKANSAS																
LITTLE ROCK																
04144001 A01	25	0.0	NO. OF SAMPLES (18) BELOW MIN. DET. EXCEEDS 50%									0.014				
TEXARKANA																
04256001 A01	25	0.0	0.0	0.0	0.0	0.0	0.006	0.006	0.006	0.008	0.008	0.017				
WEST MEMPHIS																
04274001 A01	26	0.0	0.0	0.0	0.006	0.007	0.009	0.011	0.015	0.018	0.027	0.040				
CALIFORNIA																
AUBURN																
05090001 A01	26	0.0	0.007	0.010	0.013	0.014	0.016	0.019	0.031	0.056	0.086	0.160	0.034	0.04	0.021	2.71
GLENDALE																
05294001 A01	25	0.0	0.0	0.0	0.008	0.008	0.011	0.013	0.027	0.044	0.130	0.210	0.038	0.06	0.015	4.11
LONG BEACH																
05410001 A01	26	0.0	0.007	0.009	0.012	0.014	0.016	0.026	0.038	0.048	0.089	0.170	0.034	0.04	0.021	2.85
LOS ANGELES																
05418001 A01	26	0.0	0.0	0.0	0.008	0.011	0.013	0.025	0.054	0.067	0.097	0.283	0.043	0.06	0.017	4.22
OAKLAND																
05533001 A01	25	0.006	0.011	0.013	0.016	0.017	0.026	0.030	0.034	0.037	0.097	0.140	0.035	0.03	0.025	2.18
ONTARIO																
05538001 A01	24	0.0	0.0	0.0	0.007	0.008	0.009	0.011	0.016	0.018	0.033	0.086				
PASADENA																
05576001 A01	25	0.0	0.0	0.0	0.007	0.009	0.012	0.014	0.022	0.032	0.058	0.110	0.022	0.03	0.012	3.14
RIVERSIDE																
05640001 A01	26	0.0	0.0	0.0	0.0	0.007	0.012	0.015	0.020	0.021	0.051	0.130				
SACRAMENTO																
05658001 A01	26	0.0	0.0	0.0	0.0	0.006	0.007	0.007	0.009	0.012	0.014	0.024				
SAN BERNARDINO																
05668001 A01	26	0.0	0.0	0.007	0.009	0.011	0.013	0.017	0.019	0.027	0.031	0.067	0.017	0.01	0.012	2.41
SAN DIEGO																
05680001 A01	26	0.0	0.006	0.010	0.010	0.013	0.013	0.019	0.032	0.036	0.059	0.075	0.024	0.02	0.017	2.48
SAN FRANCISCO																
05686001 A01	26	0.0	NO. OF SAMPLES (15) BELOW MIN. DET. EXCEEDS 50%									0.230				
COLORADO																
DENVER																
06058001 A01	24	0.0	NO. OF SAMPLES (13) BELOW MIN. DET. EXCEEDS 50%									0.029				
CONNECTICUT																
HARTFORD																
07042001 A01	26	0.0	0.008	0.012	0.019	0.023	0.025	0.036	0.058	0.064	0.085	0.260	0.044	0.05	0.027	2.75
NEW HAVEN																
07070001 A01	26	0.016	0.019	0.023	0.027	0.041	0.048	0.059	0.091	0.110	0.190	0.450	0.084	0.10	0.054	2.45
DELAWARE																
NEWARK																
08014001 A01	24	0.0	0.0	0.0	0.0	0.0	0.006	0.008	0.011	0.013	0.019	0.069				
WILMINGTON																
08026001 A01	23	0.0	0.009	0.017	0.020	0.027	0.031	0.031	0.047	0.110	0.170	0.360	0.066	0.09	0.035	3.23

Table 11-1 (continued). NICKEL, URBAN FREQUENCY DISTRIBUTIONS, 1968

($\mu g/m^3$)

LOCATION	NO. SAMP.	MIN.	FREQUENCY DISTRIBUTION, %									MAX.	ARITHMETIC		GEOMETRIC	
			10	20	30	40	50	60	70	80	90		MEAN	STD. DEV.	MEAN	STD. DEV.
DIST COLUMBIA WASHINGTON 090020001 A01	26	0.0	0.0	0.009	0.012	0.015	0.020	0.023	0.026	0.031	0.049	0.066	0.022	0.02	0.016	2.42
FLORIDA JACKSONVILLE 101960002 A01	25	0.0	0.0	0.0	0.008	0.009	0.015	0.017	0.019	0.023	0.050	0.084	0.019	0.02	0.012	2.74
FLORIDA TAMPA 104360002 A01	23	0.0	0.006	0.006	0.006	0.010	0.013	0.018	0.019	0.029	0.033	0.055	0.017	0.01	0.013	2.17
GEORGIA ATLANTA 110200001 A01	26	0.0	NO. OF SAMPLES (18) BELOW MIN. DET. EXCEEDS 50%									0.023				
HAWAII HONOLULU 120120001 A01	26	0.010	0.014	0.018	0.023	0.033	0.035	0.041	0.059	0.071	0.330	0.680	0.094	0.16	0.045	2.94
IDAHO BOISE CITY 130220001 A01	26	0.0	NO. OF SAMPLES (14) BELOW MIN. DET. EXCEEDS 50%									0.015				
ILLINOIS CHICAGO 141220001 A01	25	0.007	0.007	0.009	0.012	0.017	0.019	0.021	0.045	0.075	0.078	0.087	0.033	0.03	0.023	2.45
EAST ST LOUIS 142120001 A01	25	0.0	0.007	0.007	0.007	0.007	0.008	0.009	0.012	0.016	0.019	0.063	0.012	0.01	0.010	1.92
JOLIET 143760001 A01	21	0.0	0.0	0.0	0.006	0.006	0.007	0.008	0.009	0.009	0.015	0.020				
ROCKFORD 146480001 A01	25	0.0	0.0	0.0	0.006	0.007	0.009	0.009	0.010	0.014	0.021	0.022				
SPRINGFIELD 147280001 A01	23	0.0	NO. OF SAMPLES (13) BELOW MIN. DET. EXCEEDS 50%									0.025				
INDIANA EAST CHICAGO 151180001 A01	26	0.011	0.017	0.027	0.027	0.035	0.036	0.043	0.067	0.077	0.120	0.220	0.056	0.05	0.042	2.09
HAMMOND 151780001 A01	26	0.0	0.0	0.007	0.007	0.011	0.014	0.020	0.021	0.023	0.030	0.099	0.020	0.02	0.013	2.79
INDIANAPOLIS 152040001 A01	25	0.0	0.010	0.012	0.013	0.014	0.016	0.017	0.019	0.028	0.045	0.170	0.027	0.04	0.017	2.43
SOUTH BEND 153880001 A01	24	0.0	0.0	0.007	0.007	0.008	0.012	0.015	0.017	0.022	0.024	0.027	0.013	0.01	0.010	2.19
IOWA CEDAR RAPIDS 160640001 A01	26	0.0	0.0	0.0	0.0	0.0	0.006	0.006	0.007	0.007	0.012	0.014				
DES MOINES 161180001 A01	26	0.0	0.0	0.006	0.007	0.007	0.008	0.009	0.009	0.010	0.014	0.019	0.008	0.00	0.007	1.64
DUBUQUE 161260001 A01	23	0.0	0.0	0.0	0.005	0.007	0.007	0.008	0.009	0.011	0.011	0.015				
KANSAS KANSAS CITY 171800001 A01	25	0.0	0.007	0.007	0.008	0.009	0.010	0.010	0.012	0.014	0.019	0.024	0.011	0.00	0.010	1.57
TOPEKA 173560001 A01	24	0.0	0.0	0.0	0.0	0.006	0.007	0.007	0.008	0.008	0.011	0.021				
WICHITA 173740001 A01	25	0.0	NO. OF SAMPLES (13) BELOW MIN. DET. EXCEEDS 50%									0.014				
KENTUCKY ASHLAND 180080002 A01	23	0.007	0.013	0.019	0.022	0.039	0.050	0.068	0.084	0.120	0.210	0.480	0.092	0.11	0.051	3.04
COVINGTON 180800001 A01	25	0.0	0.0	0.0	0.0	0.006	0.006	0.007	0.008	0.012	0.017	0.023				
LEXINGTON 182300001 A01	24	0.0	NO. OF SAMPLES (16) BELOW MIN. DET. EXCEEDS 50%									0.011				
LOUISVILLE 182380001 A01	25	0.0	0.008	0.010	0.011	0.013	0.016	0.020	0.029	0.032	0.040	0.130	0.025	0.03	0.018	2.26
LOUISIANA NEW ORLEANS 192020002 A01	25	0.013	0.033	0.038	0.042	0.053	0.058	0.076	0.160	0.180	0.200	0.280	0.100	0.08	0.074	2.27
MAINE PORTLAND 200960002 A01	21	0.009	0.009	0.016	0.020	0.030	0.052	0.110	0.130	0.460	0.730	1.300	0.224	0.35	0.071	4.89
MARYLAND BALTIMORE 210120001 A01	26	0.011	0.014	0.017	0.020	0.029	0.032	0.050	0.081	0.110	0.130	0.190	0.057	0.05	0.040	2.37

Table 11-1 (continued). NICKEL, URBAN FREQUENCY DISTRIBUTIONS, 1968

($\mu g/m^3$)

LOCATION	NO. SAMP.	MIN.	FREQUENCY DISTRIBUTION, %									MAX.	ARITHMETIC		GEOMETRIC	
			10	20	30	40	50	60	70	80	90		MEAN	STD. DEV.	MEAN	STD. DEV.
MASSACHUSETTS																
BOSTON																
220240001 A01	25	0.036	0.039	0.051	0.058	0.062	0.094	0.097	0.110	0.120	0.160	0.200	0.090	0.04	0.081	1.62
WORCHESTER																
222640001 A01	24	0.006	0.008	0.013	0.015	0.019	0.020	0.033	0.054	0.082	0.110	0.190	0.046	0.05	0.029	2.67
MICHIGAN																
DETROIT																
231180001 A01	26	0.006	0.008	0.010	0.012	0.015	0.022	0.028	0.034	0.047	0.064	0.480	0.050	0.10	0.024	2.78
FLINT																
231580001 A01	26	0.0	NO. OF SAMPLES (14) BELOW MIN. DET. EXCEEDS 50%									0.039				
GRAND RAPIDS																
231820001 A01	26	0.0	0.0	0.0	0.0	0.007	0.009	0.009	0.012	0.013	0.018	0.023				
TRENTON																
235120001 A01	25	0.0	0.0	0.0	0.008	0.009	0.012	0.016	0.016	0.018	0.021	0.070	0.014	0.01	0.010	2.37
MINNESOTA																
DULUTH																
241040001 A01	23	0.0	0.0	0.0	0.007	0.008	0.012	0.013	0.013	0.016	0.017	0.019				
MINNEAPOLIS																
242260001 A01	26	0.006	0.007	0.007	0.009	0.009	0.009	0.011	0.012	0.013	0.016	0.030	0.011	0.00	0.010	1.43
MOORHEAD																
242320001 A01	26	0.0	NO. OF SAMPLES (15) BELOW MIN. DET. EXCEEDS 50%									0.010				
ST PAUL																
243300001 A01	26	0.0	0.0	0.0	0.007	0.008	0.009	0.012	0.015	0.017	0.031	0.052	0.013	0.01	0.009	2.41
MISSISSIPPI																
JACKSON																
251260002 A01	26	0.0	NO. OF SAMPLES (22) BELOW MIN. DET. EXCEEDS 50%									0.011				
MISSOURI																
KANSAS CITY																
262380001 A01	24	0.0	0.0	0.0	0.0	0.0	0.0	0.007	0.007	0.015	0.016	0.029				
MONTANA																
HELENA																
270720001 A01	24	0.0	NO. OF SAMPLES (20) BELOW MIN. DET. EXCEEDS 50%									0.012				
NEBRASKA																
OMAHA																
281880001 A01	25	0.0	NO. OF SAMPLES (17) BELOW MIN. DET. EXCEEDS 50%									0.032				
NEVADA																
LAS VEGAS																
290320001 A01	24	0.0	NO. OF SAMPLES (15) BELOW MIN. DET. EXCEEDS 50%									0.011				
RENO																
290480001 A01	25	0.007	0.013	0.015	0.023	0.032	0.040	0.048	0.055	0.064	0.090	0.250	0.050	0.05	0.036	2.26
NEW HAMPSHIRE																
CONCORD																
300120001 A01	25	0.0	0.0	0.006	0.009	0.009	0.011	0.012	0.016	0.020	0.030	0.085	0.017	0.02	0.011	2.41
NEW JERSEY																
BAYONNE																
310180001 A01	21	0.017	0.020	0.022	0.028	0.034	0.048	0.059	0.071	0.090	0.140	0.160	0.063	0.05	0.048	2.11
BURLINGTON CO																
310660002 A01	25	0.0	0.006	0.006	0.009	0.010	0.012	0.014	0.017	0.018	0.028	0.064	0.015	0.01	0.012	2.10
CAMDEN																
310720001 A01	26	0.011	0.027	0.033	0.034	0.041	0.044	0.048	0.055	0.067	0.088	0.160	0.052	0.03	0.045	1.73
GLASSBORO																
311700001 A01	25	0.0	0.0	0.005	0.007	0.010	0.012	0.015	0.018	0.021	0.023	0.032	0.014	0.01	0.011	2.21
HAMILTON																
311940001 A01	21	0.0	0.0	0.011	0.013	0.022	0.023	0.025	0.029	0.035	0.038	0.080	0.025	0.02	0.019	2.40
JERSEY CITY																
312320001 A01	25	0.014	0.018	0.021	0.026	0.035	0.039	0.046	0.055	0.074	0.190	0.370	0.069	0.08	0.045	2.34
NEWARK																
313480001 A01	24	0.006	0.008	0.018	0.023	0.032	0.046	0.069	0.077	0.100	0.130	0.210	0.061	0.05	0.040	2.85
PATERSON																
314140001 A01	25	0.0	0.007	0.010	0.015	0.017	0.025	0.032	0.051	0.064	0.130	0.190	0.046	0.05	0.026	3.16
PERTH AMBOY																
314220001 A01	26	0.006	0.014	0.016	0.019	0.022	0.023	0.029	0.037	0.038	0.066	0.084	0.031	0.02	0.026	1.83
TRENTON																
3154000?1 A01	24	0.006	0.007	0.008	0.012	0.014	0.017	0.022	0.023	0.033	0.047	0.059	0.021	0.02	0.017	1.97
NEW MEXICO																
ALBUQUERQUE																
320040001 A01	24	0.0	NO. OF SAMPLES (24) BELOW MIN. DET. EXCEEDS 50%									0.0				

Table 11-1 (continued). NICKEL, URBAN FREQUENCY DISTRIBUTIONS, 1968

($\mu g/m^3$)

LOCATION	NO. SAMP.	MIN.	FREQUENCY DISTRIBUTION, % 10	20	30	40	50	60	70	80	90	MAX.	ARITHMETIC MEAN	ARITHMETIC STD. DEV.	GEOMETRIC MEAN	GEOMETRIC STD. DEV.
NORTH CAROLINA																
CHARLOTTE																
340700001 A01	25	0.0	0.007	0.007	0.007	0.009	0.009	0.009	0.011	0.012	0.020	0.028	0.011	0.01	0.010	1.66
DURHAM																
341160001 A01	23	0.0	0.006	0.007	0.007	0.009	0.010	0.012	0.012	0.016	0.022	0.032	0.012	0.01	0.010	1.73
NORTH DAKOTA																
BISMARCK																
350100001 A01	25	0.0	0.0	0.0	0.007	0.007	0.007	0.007	0.007	0.007	0.009	0.010	0.006	0.00	0.006	1.65
OHIO																
AKRON																
360060001 A01	25	0.0	0.0	0.007	0.009	0.011	0.012	0.013	0.016	0.018	0.030	0.033	0.014	0.01	0.011	2.04
CINCINNATI																
361220001 A01	26	0.0	0.007	0.007	0.007	0.009	0.009	0.010	0.010	0.012	0.021	0.038	0.011	0.01	0.009	1.77
CLEVELAND																
361300001 A01	26	0.0	0.0	0.007	0.008	0.013	0.014	0.017	0.023	0.025	0.040	0.054	0.017	0.01	0.012	2.56
COLUMBUS																
361460001 A01	24	0.0	0.0	0.006	0.007	0.009	0.012	0.016	0.022	0.027	0.047	0.077	0.019	0.02	0.012	2.71
DAYTON																
361660001 A01	26	0.0	0.0	0.0	0.0	0.0	0.006	0.008	0.008	0.010	0.017	0.021				
TOLEDO																
366600001 A01	23	0.0	0.0	0.006	0.008	0.009	0.011	0.011	0.015	0.015	0.019	0.026	0.011	0.01	0.010	1.93
YOUNGSTOWN																
367760001 A01	25	0.007	0.009	0.009	0.011	0.013	0.016	0.016	0.019	0.021	0.110	0.440	0.040	0.09	0.019	2.66
OKLAHOMA																
OKLAHOMA CITY																
372200001 A01	22	0.0	NO. OF SAMPLES E			20% BELOW MIN. DET.			EXCEEDS 50%			0.009				
TULSA																
373000001 A01	24	0.0	NO. OF SAMPLES E			19% BELOW MIN. DET.			EXCEEDS 50%			0.013				
OREGON																
MEDFORD																
381160001 A01	25	0.0	0.0	0.0	0.008	0.008	0.011	0.012	0.015	0.017	0.021	0.039				
PORTLAND																
381460001 A01	26	0.014	0.028	0.030	0.032	0.046	0.052	0.052	0.087	0.100	0.150	0.490	0.081	0.09	0.057	2.15
PENNSYLVANIA																
ALLENTOWN																
390120001 A01	26	0.010	0.012	0.016	0.018	0.019	0.021	0.027	0.029	0.039	0.068	0.110	0.031	0.02	0.025	1.86
ALTOONA																
390140001 A01	23	0.0	0.0	0.0	0.0	0.0	0.006	0.006	0.007	0.009	0.012	0.015				
BETHLEHEM																
390780002 A01	24	0.006	0.007	0.008	0.014	0.014	0.018	0.022	0.031	0.039	0.067	0.170	0.033	0.04	0.021	2.47
HARRISBURG																
393880001 A01	26	0.0	0.006	0.007	0.009	0.009	0.014	0.024	0.032	0.037	0.063	0.160	0.027	0.03	0.016	2.74
HAZLETON																
393960001 A01	24	0.0	0.0	0.0	0.0	0.007	0.007	0.009	0.013	0.020	0.024	0.092				
JOHNSTOWN																
394460001 A01	23	0.009	0.013	0.013	0.016	0.026	0.030	0.032	0.038	0.048	0.079	0.099	0.035	0.02	0.029	1.95
PHILADELPHIA																
397140001 A01	26	0.016	0.033	0.039	0.042	0.047	0.052	0.068	0.087	0.099	0.200	0.310	0.085	0.07	0.065	2.04
PITTSBURGH																
397260001 A01	26	0.010	0.013	0.020	0.022	0.030	0.035	0.038	0.058	0.066	0. 20	0.190	0.052	0.05	0.037	2.27
READING																
397620001 A01	25	0.018	0.021	0.023	0.035	0.039	0.042	0.072	0.093	0.110	0.190	0.530	0.092	0.11	0.060	2.44
SCRANTON																
398040001 A01	25	0.010	0.013	0.015	0.016	0.018	0.022	0.026	0.028	0.037	0.054	0.090	0.029	0.02	0.024	1.77
WARMINSTER																
399160001 A01	25	0.0	0.0	0.006	0.008	0.010	0.012	0.012	0.014	0.022	0.045	0.290	0.028	0.06	0.013	2.94
WEST CHESTER																
399280001 A01	24	0.0	0.007	0.007	0.009	0.009	0.010	0.012	0.014	0.015	0.029	0.038	0.013	0.01	0.011	1.79
WILKES-BARRE																
399430001 A01	24	0.0	0.009	0.010	0.013	0.016	0.017	0.021	0.022	0.030	0.033	0.047	0.020	0.01	0.017	1.88
YORK																
399560001 A01	25	0.0	0.008	0.010	0.010	0.014	0.016	0.016	0.022	0.023	0.060	0.110	0.025	0.03	0.017	2.33
PUERTO RICO																
BAYAMON																
400380001 A01	25	0.0	0.0	0.007	0.009	0.014	0.019	0.020	0.029	0.029	0.032	0.075	0.021	0.02	0.015	2.46
CATANO																
400560001 A01	25	0.009	0.013	0.021	0.033	0.040	0.049	0.053	0.059	0.063	0.079	0.110	0.049	0.03	0.040	1.95

Table 11-1 (continued). NICKEL, URBAN FREQUENCY DISTRIBUTIONS, 1968

($\mu g/m^3$)

LOCATION	NO. SAMP.	MIN.	FREQUENCY DISTRIBUTION, %									MAX.	ARITHMETIC		GEOMETRIC	
			10	20	30	40	50	60	70	80	90		MEAN	STD. DEV.	MEAN	STD. DEV.
PUERTO RICO																
GUAYANILLA																
401380001 A01	25	0.0	0.006	0.006	0.007	0.008	0.012	0.015	0.018	0.030	0.039	0.058	0.018	0.02	0.012	2.40
PONCE																
401920001 A01	25	0.0	0.008	0.008	0.009	0.009	0.010	0.012	0.013	0.014	0.017	0.020	0.011	0.00	0.010	1.66
RHODE ISLAND																
EAST PROVIDENCE																
410120001 A01	26	0.009	0.013	0.016	0.017	0.019	0.022	0.026	0.033	0.040	0.054	0.091	0.029	0.02	0.025	1.76
PROVIDENCE																
410300001 A01	25	0.012	0.014	0.020	0.030	0.032	0.042	0.051	0.084	0.110	0.190	0.200	0.065	0.06	0.046	2.36
SOUTH CAROLINA																
COLUMBIA																
420760001 A01	24	0.0	NO. OF SAMPLES (14) BELOW MIN. DET. EXCEEDS 50%									0.041				
GREENVILLE																
421160001 A01	25	0.0	0.0	0.0	0.007	0.008	0.009	0.009	0.010	0.013	0.014	0.022	0.009	0.00	0.007	1.97
SOUTH DAKOTA																
SIOUX FALLS																
431480001 A01	22	0.0	NO. OF SAMPLES (13) BELOW MIN. DET. EXCEEDS 50%									0.028				
TENNESSEE																
CHATTANOOGA																
440380001 A01	25	0.0	0.0	0.0	0.009	0.009	0.011	0.011	0.013	0.014	0.030	0.039	0.012	0.01	0.009	2.20
KNOXVILLE																
441740001 A01	26	0.0	NO. OF SAMPLES (15) BELOW MIN. DET. EXCEEDS 50%									0.027				
MEMPHIS																
442340001 A01	25	0.0	NO. OF SAMPLES (22) BELOW MIN. DET. EXCEEDS 50%									0.012				
NASHVILLE																
442540001 A01	25	0.0	NO. OF SAMPLES (18) BELOW MIN. DET. EXCEEDS 50%									0.024				
TEXAS																
DALLAS																
451310002 A01	26	0.0	NO. OF SAMPLES (20) BELOW MIN. DET. EXCEEDS 50%									0.014				
HOUSTON																
452560001 A01	26	0.0	0.0	0.0	0.0	0.007	0.008	0.013	0.018	0.025	0.032	0.046				
PASADENA																
454060001 A01	26	0.0	0.0	0.006	0.006	0.007	0.009	0.011	0.014	0.018	0.055	0.140	0.018	0.03	0.010	2.79
SAN ANTONIO																
454570001 A01	25	0.0	NO. OF SAMPLES (18) BELOW MIN. DET. EXCEEDS 50%									0.036				
UTAH																
OGDEN																
460680001 A01	25	0.0	NO. OF SAMPLES (21) BELOW MIN. DET. EXCEEDS 50%									0.026				
SALT LAKE CITY																
460920001 A01	26	0.0	NO. OF SAMPLES (16) BELOW MIN. DET. EXCEEDS 50%									0.025				
VERMONT																
BURLINGTON																
470140001 A01	24	0.0	0.0	0.0	0.006	0.009	0.011	0.015	0.021	0.024	0.029	0.042	0.015	0.01	0.010	2.63
VIRGINIA																
DANVILLE																
480920001 A01	25	0.0	NO. OF SAMPLES (19) BELOW MIN. DET. EXCEEDS 50%									0.011				
HAMPTON																
481440001 A01	25	0.0	0.0	0.006	0.008	0.008	0.009	0.011	0.013	0.018	0.022	0.032	0.012	0.01	0.010	1.96
LYNCHBURG																
481840001 A01	26	0.0	0.0	0.007	0.007	0.008	0.009	0.010	0.012	0.014	0.016	0.020	0.010	0.00	0.009	1.76
NORFOLK																
482140001 A01	26	0.006	0.010	0.011	0.012	0.014	0.015	0.019	0.022	0.023	0.032	0.039	0.018	0.01	0.016	1.59
PORTSMOUTH																
482440001 A01	26	0.0	0.0	0.007	0.007	0.009	0.011	0.013	0.014	0.016	0.025	0.031	0.012	0.01	0.010	1.97
RICHMOND																
482660001 A01	26	0.0	0.0	0.0	0.0	0.007	0.009	0.011	0.013	0.017	0.042	0.043				
ROANOKE																
482700001 A01	25	0.0	NO. OF SAMPLES (14) BELOW MIN. DET. EXCEEDS 50%									0.018				
WASHINGTON																
SEATTLE																
491840001 A01	26	0.008	0.013	0.015	0.015	0.026	0.027	0.031	0.050	0.071	0.110	0.150	0.043	0.04	0.031	2.24
WEST VIRGINIA																
CHARLESTON																
500280001 A01	26	0.0	0.0	0.008	0.009	0.012	0.014	0.017	0.023	0.024	0.036	0.087	0.019	0.02	0.013	2.53
WISCONSIN																
EAU CLAIRE																
510840001 A01	24	0.0	NO. OF SAMPLES (21) BELOW MIN. DET. EXCEEDS 50%									0.020				

Table 11-1 (continued). NICKEL, URBAN FREQUENCY DISTRIBUTIONS, 1968

($\mu g/m^3$)

LOCATION	NO. SAMP.	MIN.	FREQUENCY DISTRIBUTION, %									MAX.	ARITHMETIC		GEOMETRIC	
			10	20	30	40	50	60	70	80	90		MEAN	STD. DEV.	MEAN	STD. DEV.
WISCONSIN																
KENOSHA																
511540001 A01	25	0.0	NO. OF SAMPLES (18) BELOW MIN. DET. EXCEEDS 50%									0.019				
MADISON																
511860001 A01	25	0.0	NO. OF SAMPLES (22) BELOW MIN. DET. EXCEEDS 50%									0.008				
MILWAUKEE																
512200001 A01	25	0.0	0.0	0.0	0.0	0.0	0.007	0.007	0.013	0.014	0.017	0.019				
SUPERIOR																
513480001 A01	23	0.0	NO. OF SAMPLES (16) BELOW MIN. DET. EXCEEDS 50%									0.015				
WYOMING																
CASPER																
520120001 A01	26	0.0	NO. OF SAMPLES (25) BELOW MIN. DET. EXCEEDS 50%									0.014				
CHEYENNE																
520140001 A01	26	0.0	NO. OF SAMPLES (26) BELOW MIN. DET. EXCEEDS 50%									0.0				

Table 11-2. NICKEL, NONURBAN FREQUENCY DISTRIBUTIONS, 1968

($\mu g/m^3$)

LOCATION	NO. SAMP.	MIN.	FREQUENCY DISTRIBUTION, %									MAX.	ARITHMETIC		GEOMETRIC	
			10	20	30	40	50	60	70	80	90		MEAN	STD. DEV.	MEAN	STD. DEV.
ARIZONA																
GRAND CANYON NAT PI																
03037001 A03	25	0.0	NO. OF SAMPLES (25) BELOW MIN. DET. EXCEEDS 50%									0.0				
ARKANSAS																
MONTGOMERY CO																
04176001 A03	25	0.0	NO. OF SAMPLES (24) BELOW MIN. DET. EXCEEDS 50%									0.005				
CALIFORNIA																
HUMBOLDT CO																
05330001 A03	26	0.0	NO. OF SAMPLES (24) BELOW MIN. DET. EXCEEDS 50%									0.005				
COLORADO																
MESA VERDE NAT PAR																
06151 0002 A03	21	0.0	NO. OF SAMPLES (19) BELOW MIN. DET. EXCEEDS 50%									0.010				
DELAWARE																
KENT CO																
08006 0001 A03	24	0.0	0.0	0.0	0.0	0.0	0.0	0.003	0.005	0.007	0.008	0.022				
IDAHO																
BUTTE CO																
13034 0001 A03	24	0.0	NO. OF SAMPLES (23) BELOW MIN. DET. EXCEEDS 50%									0.004				
INDIANA																
MONROE CO																
15280 0001 A03	24	0.0	NO. OF SAMPLES (18) BELOW MIN. DET. EXCEEDS 50%									0.008				
PARKE CO																
15326 0001 A03	25	0.0	NO. OF SAMPLES (24) BELOW MIN. DET. EXCEEDS 50%									0.005				
MAINE																
ACADIA NAT PARK																
20001 0031 A03	26	0.0	0.0	0.0	0.0	0.0	0.004	0.004	0.006	0.007	0.020	0.055				
MARYLAND																
CALVERT CO																
21028 0001 A03	23	0.0	0.0	0.0	0.002	0.003	0.003	0.004	0.006	0.007	0.010	0.013	0.005	0.00	0.003	2.30
MISSISSIPPI																
JACKSON CO																
25128 0001 A03	24	0.0	NO. OF SAMPLES (19) BELOW MIN. DET. EXCEEDS 50%									0.007				
MISSOURI																
SHANNON CO																
26448 0001 A03	25	0.0	NO. OF SAMPLES (24) BELOW MIN. DET. EXCEEDS 50%									0.002				
MONTANA																
GLACIER NAT PARK																
27057 0001 A03	25	0.0	NO. OF SAMPLES (14) BELOW MIN. DET. EXCEEDS 50%									0.006				
NEBRASKA																
THOMAS CO																
28248 0031 A03	24	0.0	NO. OF SAMPLES (22) BELOW MIN. DET. EXCEEDS 50%									0.006				
NEVADA																
WHITE PINE CO																
29056 0001 A03	26	0.0	NO. OF SAMPLES (18) BELOW MIN. DET. EXCEEDS 50%									0.004				
NEW HAMPSHIRE																
COOS CO																
30014 0001 A03	23	0.0	NO. OF SAMPLES (16) BELOW MIN. DET. EXCEEDS 50%									0.012				
NEW YORK																
JEFFERSON CO																
33334 0001 A03	26	0.0	NO. OF SAMPLES (14) BELOW MIN. DET. EXCEEDS 50%									0.012				
NORTH CAROLINA																
CAPE HATTERAS NAT																
34059 0001 A03	25	0.0	0.0	0.0	0.0	0.0	0.002	0.003	0.003	0.004	0.010	0.033				
OKLAHOMA																
CHEROKEE CO																
37048 0001 A03	25	0.0	NO. OF SAMPLES (22) BELOW MIN. DET. EXCEEDS 50%									0.005				
OREGON																
CURRY CO																
38044 0001 A03	26	0.0	NO. OF SAMPLES (17) BELOW MIN. DET. EXCEEDS 50%									0.013				
PENNSYLVANIA																
CLARION CO																
39176 0001 A03	26	0.0	NO. OF SAMPLES (16) BELOW MIN. DET. EXCEEDS 50%									0.007				
RHODE ISLAND																
WASHINGTON CO																
41038 0001 A03	26	0.0	0.0	0.002	0.003	0.004	0.004	0.006	0.009	0.009	0.014	0.029	0.007	0.01	0.004	2.67
SOUTH CAROLINA																
RICHLAND CO																
42190 0001 A03	23	0.0	NO. OF SAMPLES (21) BELOW MIN. DET. EXCEEDS 50%									0.005				
SOUTH DAKOTA																
BLACK HILLS NAT FO																
43011 0001 A03	26	0.0	NO. OF SAMPLES (26) BELOW MIN. DET. EXCEEDS 50%									0.0				

Table 11-2 (continued). NICKEL, NONURBAN FREQUENCY DISTRIBUTIONS, 1968

($\mu g/m^3$)

LOCATION	NO. SAMP.	MIN.	FREQUENCY DISTRIBUTION, %									MAX.	ARITHMETIC		GEOMETRIC	
			10	20	30	40	50	60	70	80	90		MEAN	STD. DEV.	MEAN	STD. DEV.
TEXAS																
MATAGORDA CO																
453530001 A03	25	0.0	NO. OF SAMPLES (23) BELOW MIN. DET. EXCEEDS 50%									0.005				
VERMONT																
ORANGE CO																
470360001 A03	26	0.0	0.0	0.0	0.0	0.002	0.002	0.004	0.007	0.011	0.020	0.028				
VIRGINIA																
SHENANDOAH NAT PAR																
482890001 A03	26	0.0	NO. OF SAMPLES (24) BELOW MIN. DET. EXCEEDS 50%									0.003				
WYOMING																
YELLOWSTONE NAT PA																
520860001 A03	26	0.0	NO. OF SAMPLES (26) BELOW MIN. DET. EXCEEDS 50%									0.0				

Table 11-3. NICKEL, URBAN QUARTERLY COMPOSITES AND YEARLY AVERAGES, 1969

($\mu g/m^3$)

LOCATION	1ST QTR.	2ND QTR.	3RD QTR.	4TH QTR.	YR. AVG.
ALABAMA					
GADSDEN					
011480001 A01	0.0	0.0	0.0	0.0	*****
HUNTSVILLE					
011860001 A01	0.009	0.0	0.0	0.009	*****
MOBILE					
012380001 A01	0.017	0.014	0.0	0.010	0.011
MONTGOMERY					
012460001 A01	0.0	0.011	0.0	0.0	*****
ALASKA					
ANCHORAGE					
020040003 A01	0.0	0.011	0.011	0.009	0.008
FAIRBANKS					
020160001 A01	0.0	0.012	0.013	0.0	*****
ARIZONA					
MARICOPA CO					
030440001 A01	0.0	0.0	0.0	0.0	*****
PHOENIX					
030600002 A01	0.011	0.0	0.0	0.0	*****
TUCSON					
030930001 A01	0.0	0.0	0.0	0.010	*****
ARKANSAS					
LITTLE ROCK					
041440001 A01	0.011	0.0	0.0	0.0	*****
TEXARKANA					
042560001 A01	0.0	0.009	0.010	0.009	0.007
WEST MEMPHIS					
047740001 A01	0.010	0.013	0.013	0.014	0.012
CALIFORNIA					
ANAHEIM					
050230001 A01	0.024	0.017	0.027	0.027	0.022
BURBANK					
050900001 A01	0.026	0.017	0.014	0.014	0.026
FRESNO					
052800001 A01	0.0	0.009	0.015	0.022	0.012
GLENDALE					
053240001 A01	0.024	0.025	0.018	0.023	0.023
LONG BEACH					
054100001 A01	0.054	0.025	0.030	0.033	0.033
LOS ANGELES					
054180001 A01	0.043	0.013	0.024	0.021	0.030
OAKLAND					
055300001 A01	0.029	0.038	0.037	0.033	0.034
ONTARIO					
055380001 A01	0.025	0.017	0.025	0.019	0.020
RIVERSIDE					
056400001 A01	0.029	0.020	0.020	0.015	0.021
SACRAMENTO					
056540001 A01	0.0	0.0	0.022	0.0	*****
SAN BERNARDINO					
056680001 A01	0.035	0.021	0.030	0.037	0.031
SAN DIEGO					
056800001 A01	0.052	0.023	0.035	0.052	0.040
SAN FRANCISCO					
056860001 A01	0.028	0.018	0.017	0.050	0.028
SAN JOSE					
056980001 A01	0.018	0.013	0.015	0.013	0.015
SANTA ANA					
057180001 A01	0.022	0.016	0.021	0.027	0.021
TORRANCE					
058260001 A01	0.021	0.013	0.018	0.045	0.024
COLORADO					
DENVER					
060590001 A01	0.011	0.015	0.020	0.073	0.030
COLORADO (CONT)					
MONTEZUMA CO					
061400002 A01	0.0	0.0	0.0	0.0	*****
CONNECTICUT					
BRIDGEPORT					
070060001 A01	0.041	0.041	0.035	0.100	0.054
HARTFORD					
070420001 A01	0.083	0.053	0.032	0.060	0.057
NEW HAVEN					
070700001 A01	0.230	0.088	0.042	0.200	0.140
WATERBURY					
071240001 A01	0.070	0.073	0.041	0.074	0.064
DELAWARE					
WILMINGTON					
080260003 A01	0.150	0.043	0.060	0.120	0.093
DIST COLUMBIA					
WASHINGTON					
090020001 A01	0.070	0.040	0.022	0.033	0.043
FLORIDA					
JACKSONVILLE					
101360002 A01	0.048	0.077	0.025	0.014	0.041
MIAMI					
102700001 A01	0.018	0.013	0.048	0.022	0.027
ST PETERSBURG					
103980002 A01	0.021	0.009	0.013	0.010	0.013
TAMPA					
104360002 A01	0.014	0.015	0.021	0.017	0.016
GEORGIA					
ATLANTA					
110700001 A01	0.012	0.0	0.011	0.012	0.009
COLUMBUS					
111280001 A01	0.0	0.0	0.0	0.0	*****
SAVANNAH					
116500001 A01	0.026	0.009	0.014	0.013	0.015
HAWAII					
HONOLULU					
120120001 A01	0.050	0.056	0.030	0.044	0.045
IDAHO					
BOISE CITY					
130220001 A01	0.0	0.0	0.020	0.0	*****
ILLINOIS					
CHICAGO					
141220001 A01	0.110	0.025	0.013	0.056	0.051
EAST ST LOUIS					
142120001 A01	0.240	0.013	0.013	0.015	0.070
JOLIET					
143740001 A01	0.019	0.015	0.016	0.014	0.016
NORTH CHICAGO					
145620002 A01	0.023	0.017	0.011	0.0	0.013
PEORIA					
146080001 A01	0.013	0.021	0.013	0.015	0.017
ROCKFORD					
146680001 A01	0.017	0.015	0.0	0.013	0.012
SPRINGFIELD					
147280001 A01	0.012	0.0	0.017	0.0	*****
INDIANA					
EAST CHICAGO					
151180001 A01	0.110	0.170	0.052	0.084	0.104
EVANSVILLE					
151300301 A01	0.016	0.011	0.013	0.010	0.012
FORT WAYNE					
151380001 A01	0.013	0.015	0.012	0.017	0.014
GARY					
151520001 A01	0.025	0.009	0.017	0.020	0.018

Table 11-3 (continued). NICKEL, URBAN QUARTERLY COMPOSITES AND YEARLY AVERAGES, 1969

($\mu g/m^3$)

LOCATION	1ST QTR.	2ND QTR.	3RD QTR.	4TH QTR.	YR. AVG.
INDIANA					
HAMMOND					
151780001 A01	0.033	0.027	0.031	0.030	0.030
INDIANAPOLIS					
152040001 A01	0.027	0.025	0.019	0.021	0.023
NEW ALBANY					
152480001 A01	0.016	0.013	0.020	[illegible]	0.016
SOUTH BEND					
153480001 A01	0.036	0.038	0.011	0.018	0.021
TERRE HAUTE					
154080001 A01	0.011	0.011	0.0	0.0	*****
IOWA					
DAVENPORT					
161060001 A01	0.022	0.014	0.013	0.013	0.015
DES MOINES					
161180001 A01	0.010	0.010	0.009	0.0	0.006
DUBUQUE					
161240001 A01	0.016	0.010	0.0	0.012	0.011
KANSAS					
KANSAS CITY					
171400001 A01	0.016	0.010	0.012	0.010	0.014
TOPEKA					
173540001 A01	0.0	0.0	0.0	0.0	*****
WICHITA					
173740001 A01	0.006	0.0	0.0	0.0	*****
KENTUCKY					
ASHLAND					
180980002 A01	0.280	0.027	0.091	0.093	0.113
COVINGTON					
180890001 A01	0.011	0.012	0.013	0.012	0.013
LOUISVILLE					
182340001 A01	0.024	0.041	0.028	0.025	0.029
LOUISIANA					
BATON ROUGE					
190240001 A01	0.0	0.0	0.0	0.004	*****
NEW ORLEANS					
192700002 A01	0.180	0.054	0.073	0.038	0.076
SHREVEPORT					
193740001 A01	0.008	0.0	0.0	0.009	*****
MARYLAND					
BALTIMORE					
210120001 A01	0.110	0.072	0.046	0.074	0.075
MASSACHUSETTS					
BOSTON					
220740001 A01	0.140	0.072	0.046	0.130	0.097
FALL RIVER					
220980002 A01	0.091	0.040	0.030	0.054	0.054
SPRINGFIELD					
223160001 A01	0.061	0.026	0.027	0.053	0.043
WORCHESTER					
223460001 A01	0.044	0.036	0.026	0.100	0.051
MICHIGAN					
DEARBORN					
231140001 A01	0.016	0.015	0.014	0.015	0.015
DETROIT					
231180001 A01	0.025	0.034	0.023	0.030	0.025
FLINT					
231580001 A01	0.013	0.010	0.0	0.010	0.011
GRAND RAPIDS					
231870001 A01	0.014	0.019	0.009	0.009	0.013
LANSING					
[illegible]940001 A01	0.0	0.010	0.0	0.0	*****
SAGINAW					
234760001 A01	0.0	0.009	0.0	0.0	*****

LOCATION	1ST QTR.	2ND QTR.	3RD QTR.	4TH QTR.	YR. AVG.
MICHIGAN (CONT)					
TRENTON					
235120001 A01	0.014	0.017	0.009	0.012	0.014
MINNESOTA					
DULUTH					
241060001 A01	0.0	0.014	0.010	0.0	*****
MINNEAPOLIS					
243240001 A01	0.017	0.011	0.0	0.012	0.011
ST PAUL					
243330001 A01	0.035	0.0	0.0	0.009	*****
MISSOURI					
KANSAS CITY					
247180001 A01	0.015	0.009	0.0	0.011	0.010
ST LOUIS					
248780001 A01	0.019	0.014	0.015	0.032	0.020
MONTANA					
HELENA					
270770001 A01	0.0	0.0	0.0	0.0	*****
NEBRASKA					
OMAHA					
281890001 A01	0.0	0.010	0.009	0.0	*****
NEVADA					
LAS VEGAS					
290320001 A01	0.0	0.0	0.010	0.010	*****
RENO					
290480001 A01	0.083	0.063	0.043	0.074	0.060
NEW HAMPSHIRE					
CONCORD					
301220001 A01	0.013	0.021	0.011	0.023	0.017
NEW JERSEY					
ELIZABETH					
311390001 A01	0.056	0.035	0.041	0.044	0.044
GLASSBORO					
311700001 A01	0.027	0.022	0.031	0.021	0.025
HAMILTON					
311960001 A01	0.036	0.019	0.029	0.043	0.031
JERSEY CITY					
312330001 A01	0.046	0.046	0.040	0.042	0.045
NEWARK					
313420001 A01	0.071	0.036	0.052	0.048	0.054
PATERSON					
314160001 A01	0.069	0.037	0.040	0.120	0.066
PERTH AMBOY					
314720001 A01	0.073	0.028	0.035	0.043	0.045
TRENTON					
315400001 A01	0.051	0.044	0.041	0.054	0.047
NEW MEXICO					
ALBUQUERQUE					
320060001 A01	0.0	0.0	0.0	0.0	*****
NEW YORK					
ALBANY					
330260001 A01	0.049	0.026	0.023	0.040	0.035
BUFFALO					
330460001 A01	0.033	0.027	0.024	0.036	0.030
NEW YORK CITY					
336680001 A01	0.330	0.180	0.052	0.140	0.173
NIAGARA FALLS					
336740001 A01	0.021	0.042	0.033	0.012	0.027
ROCHESTER					
335760001 A01	0.024	0.012	0.021	0.023	0.020
SYRACUSE					
336820001 A01	0.037	0.014	0.013	0.022	0.021

Table 11-3 (continued). NICKEL, URBAN QUARTERLY COMPOSITES AND YEARLY AVERAGES, 1969

($\mu g/m^3$)

LOCATION	1ST QTR.	2ND QTR.	3RD QTR.	4TH QTR.	YR. AVG.
NEW YORK					
UTICA					
336480001 A01	0.028	0.018	0.015	0.023	0.022
NORTH CAROLINA					
CHARLOTTE					
340730001 A01	0.022	0.0	0.010	0.013	0.012
DURHAM					
341160001 A01	0.008	0.0	0.0	0.008	*****
GREENSBORO					
341740001 A01	0.013	0.009	0.009	0.014	0.011
WINSTON-SALEM					
344640002 A01	0.013	0.0	0.0	0.014	*****
NORTH DAKOTA					
BISMARCK					
350100001 A01	0.0	0.0	0.0	0.0	*****
OHIO					
AKRON					
360060001 A01	0.012	0.012	0.015	0.011	0.013
CANTON					
361000001 A01	0.035	0.050	0.050	0.017	0.035
CINCINNATI					
361220001 A01	0.019	0.018	0.022	0.018	0.019
CLEVELAND					
361390001 A01	0.017	0.031	0.022	0.013	0.021
COLUMBUS					
361460001 A01	0.024	0.047	0.033	0.019	0.031
DAYTON					
361660001 A01	0.012	0.014	0.009	0.009	0.011
TOLEDO					
366000001 A01	0.016	0.013	0.0	0.008	0.009
YOUNGSTOWN					
367760001 A01	0.100	0.034	0.024	0.022	0.045
OKLAHOMA					
OKLAHOMA CITY					
372200001 A01	0.0	0.0	0.0	0.0	*****
TULSA					
372800001 A01	0.009	0.0	0.0	0.011	*****
OREGON					
MEDFORD					
381160001 A01	0.016	0.011	0.009	0.033	0.017
PORTLAND					
381460001 A01	0.065	0.071	0.037	0.110	0.071
PENNSYLVANIA					
ALLENTOWN					
390120001 A01	0.041	0.031	0.027	0.071	0.042
BETHLEHEM					
390780002 A01	0.030	0.026	0.026	0.037	0.030
ERIE					
393140002 A01	0.0	0.014	0.009	0.0	*****
HARRISBURG					
393880001 A01	0.025	0.034	0.029	0.022	0.027
HAZLETON					
394540001 A01	0.012	0.0	0.0	0.0	*****
JOHNSTOWN					
394640001 A01	0.012	0.013	0.013	0.0	0.012
PHILADELPHIA					
397140001 A01	0.110	0.067	0.094	0.110	0.096
PITTSBURGH					
397760001 A01	0.036	0.053	0.037	0.030	0.042
READING					
397920001 A01	0.037	0.110	0.190	0.095	0.123
SCRANTON					
398560001 A01	0.029	0.027	0.019	0.022	0.024
WARMINSTER					
399160001 A01	0.020	0.014	0.017	0.022	0.019

LOCATION	1ST QTR.	2ND QTR.	3RD QTR.	4TH QTR.	YR. AVG.
399880001 (CONT.)					
WEST CHESTER					
399240001 A01	0.015	0.013	0.023	0.018	0.017
WILKES-BARRE					
399420001 A01	0.016	0.015	0.009	0.014	0.014
YORK					
399560001 A01	0.035	0.024	0.019	0.042	0.030
PUERTO RICO					
BAYAMON					
400390001 A01	0.038	0.014	0.009	0.028	0.022
CATANO					
400560002 A01	0.093	0.089	0.120	0.034	0.084
GUAYANILLA					
401380001 A01	0.029	0.049	0.042	0.054	0.043
PONCE					
401020001 A01	0.009	0.0	0.014	0.017	0.011
SAN JUAN					
402140001 A01	0.0	0.020	0.018	0.014	0.014
RHODE ISLAND					
EAST PROVIDENCE					
410120001 A01	0.057	0.040	0.027	0.045	0.042
PROVIDENCE					
410330001 A01	0.210	0.043	0.027	0.170	0.112
SOUTH CAROLINA					
COLUMBIA					
420760001 A01	0.008	0.0	0.0	0.0	*****
GREENVILLE					
421180001 A01	0.010	0.012	0.0	0.010	0.009
TENNESSEE					
CHATTANOOGA					
440390001 A01	0.020	0.015	0.015	0.013	0.016
KNOXVILLE					
441740001 A01	0.011	0.008	0.009	0.010	0.010
MEMPHIS					
442360001 A01	0.0	0.0	0.009	0.009	*****
NASHVILLE					
442560001 A01	0.011	0.014	0.0	0.010	0.009
TEXAS					
DALLAS					
451310002 A01	0.010	0.008	0.009	0.009	0.009
EL PASO					
451700001 A01	0.010	0.016	0.011	0.012	0.012
FORT WORTH					
451880001 A01	0.0	0.0	0.0	0.0	*****
HOUSTON					
452560001 A01	0.021	0.019	0.025	0.024	0.022
PASADENA					
452960001 A01	0.028	0.019	0.020	0.018	0.021
SAN ANTONIO					
454570001 A01	0.0	0.0	0.0	0.0	*****
UTAH					
OGDEN					
460680001 A01	0.0	0.013	0.011	0.0	*****
SALT LAKE CITY					
460990001 A01	0.011	0.0	0.0	0.016	*****
VERMONT					
BURLINGTON					
470140001 A01	0.021	0.037	0.015	0.026	0.025
VIRGINIA					
DANVILLE					
480920001 A01	0.011	0.0	0.011	0.010	0.009
NEWPORT					
481440001 A01	0.012	0.010	0.012	0.012	0.011

Table 11-3 (continued). NICKEL, URBAN QUARTERLY COMPOSITES AND YEARLY AVERAGES, 1969

($\mu g/m^3$)

LOCATION	1ST QTR.	2ND QTR.	3RD QTR.	4TH QTR.	YR. AVG.
VIRGINIA					
LYNCHBURG					
490460001 A01	0.013	0.0	0.003	0.0	*****
NEWPORT NEWS					
490120001 A01	0.014	0.017	0.011	0.020	0.016
NORFOLK					
490140001 A01	0.037	0.024	0.021	0.024	0.026
PORTSMOUTH					
490440001 A01	0.037	0.018	0.032	0.023	0.026
RICHMOND					
490460001 A01	0.023	0.014	0.013	0.024	0.021
ROANOKE					
490730001 A01	0.010	0.013	0.007	0.014	0.011
WASHINGTON					
SEATTLE					
530330001 A01	0.065	0.034	0.023	0.077	0.050
SPOKANE					
530440001 A01	0.013	0.0	0.012	0.017	0.011
TACOMA					
530460001 A01	0.049	0.041	0.024	0.044	0.040

LOCATION	1ST QTR.	2ND QTR.	3RD QTR.	4TH QTR.	YR. AVG.
WEST VIRGINIA					
CHARLESTON					
540280001 A01	0.018	0.024	0.022	0.011	0.022
WISCONSIN					
EAU CLAIRE					
550460001 A01	0.003	0.0	0.0	0.0	*****
KENOSHA					
551540031 S01	0.021	0.015	0.008	0.019	0.013
MADISON					
551460001 A01	0.005	0.0	0.0	0.0	*****
MILWAUKEE					
552280001 A11	0.008	0.014	0.014	0.011	0.012
RACINE					
552480001 A01	0.0	0.0	0.0	0.008	*****
SUPERIOR					
553460001 A01	0.011	0.0	0.0	0.009	*****
WYOMING					
CASPER					
560120031 S01	0.0	0.0	0.0	0.0	*****
CHEYENNE					
560140001 A01	0.0	0.0	0.0	0.0	*****

Table 11-4. NICKEL, NONURBAN QUARTERLY COMPOSITES AND YEARLY AVERAGES, 1969

($\mu g/m^3$)

LOCATION	1ST QTR.	2ND QTR.	3RD QTR.	4TH QTR.	YR. AVG.
ARIZONA					
GRAND CANYON NAT PI					
030370001 A03	0.0	0.0	0.0	0.0	*****
ARKANSAS					
MONTGOMERY CO					
041760001 A03	0.0	0.0	0.0	0.0	*****
CALIFORNIA					
HUMBOLDT CO					
053330001 A03	0.0	0.0	0.0	0.0	*****
FLORIDA					
HARDEE CO					
101680001 A03	0.0	0.0	0.0	0.0	*****
IDAHO					
BUTTE CO					
130340001 A03	0.0	0.0	0.0	0.0	*****
INDIANA					
MONROE CO					
152800001 A03	0.0	0.0	0.016	0.0	*****
PARKE CO					
153260001 A03	0.0	0.0	0.0	0.0	*****
MAINE					
ACADIA NAT PARK					
230010001 A03	0.013	0.025	0.008	0.005	0.013
MARYLAND					
CALVERT CO					
210240001 A03	0.009	0.036	0.018	0.005	0.017
MISSOURI					
SHANNON CO					
266480002 A03	0.0	0.0	0.0	0.0	*****
MONTANA					
GLACIER NAT PARK					
270570001 A03	0.0	0.0	0.0	0.0	*****
NEBRASKA					
THOMAS CO					
292480001 A03	0.0	0.0	0.0	0.0	*****
NEVADA					
WHITE PINE CO					
290560001 A03	0.0	0.0	0.0	0.0	*****
NEW HAMPSHIRE					
COOS CO					
330140001 A03	0.0	0.0	0.0	0.0	*****
NEW YORK					
JEFFERSON CO					
333340001 A03	0.014	0.007	0.007	0.009	0.009

LOCATION	1ST QTR.	2ND QTR.	3RD QTR.	4TH QTR.	YR. AVG.
NORTH CAROLINA					
CAPE HATTERAS NAT					
340590001 A03	0.007	0.005	0.091	0.039	0.035
OKLAHOMA					
CHEROKEE CO					
370480001 A03	0.0	0.0	0.0	0.0	*****
OREGON					
CURRY CO					
380460001 A03	0.0	0.0	0.0	0.005	*****
PENNSYLVANIA					
CLARION CO					
391760001 A03	0.008	0.005	0.0	0.006	0.005
RHODE ISLAND					
WASHINGTON CO					
410360002 A03	0.017	0.010	0.009	0.010	0.011
SOUTH CAROLINA					
RICHLAND CO					
421900001 A03	0.0	0.0	0.0	0.0	*****
SOUTH DAKOTA					
BLACK HILLS NAT FO					
430110001 A03	0.0	0.0	0.0	0.0	*****
TENNESSEE					
CUMBERLAND CO					
440680001 A03	0.006	0.0	0.0	0.0	*****
TEXAS					
MATAGORDA CO					
453530001 A03	0.0	0.0	0.0	0.0	*****
VERMONT					
ORANGE CO					
470360001 A03	0.011	0.007	0.011	0.017	0.012
VIRGINIA					
SHENANDOAH NAT PAR					
482890001 A03	0.007	0.004	0.0	0.005	0.005
WYTHE CO					
483440001 A03	0.004	0.0	0.0	0.0	*****
WISCONSIN					
DOOR CO					
510780001 A03	0.0	0.0	0.0	0.0	*****
WYOMING					
YELLOWSTONE NAT PA					
520860001 A03	0.0	0.0	0.0	0.0	*****

SECTION 12. URBAN AND NONURBAN METALS IN SUSPENDED PARTICULATES: TIN

Table 12-1. TIN, URBAN FREQUENCY DISTRIBUTIONS, 1968

($\mu g/m^3$)

LOCATION	NO. SAMP.	MIN.	FREQUENCY DISTRIBUTION, %									MAX.	ARITHMETIC		GEOMETRIC	
			10	20	30	40	50	60	70	80	90		MEAN	STD. DEV.	MEAN	STD. DEV.
ALABAMA																
GADSDEN																
011440001 A01	25	10.0	NO. OF SAMPLES (25) BELOW MIN. DET. EXCEEDS 50%									10.0				
HUNTSVILLE																
011860001 A01	26	10.0	NO. OF SAMPLES (26) BELOW MIN. DET. EXCEEDS 50%									10.0				
MOBILE																
012490001 A01	25	10.0	NO. OF SAMPLES (25) BELOW MIN. DET. EXCEEDS 50%									10.0				
MONTGOMERY																
012660001 A01	26	10.0	NO. OF SAMPLES (26) BELOW MIN. DET. EXCEEDS 50%									10.0				
ALASKA																
ANCHORAGE																
020040001 A01	26	10.0	NO. OF SAMPLES (26) BELOW MIN. DET. EXCEEDS 50%									10.0				
FAIRBANKS																
020160001 A01	23	10.0	NO. OF SAMPLES (23) BELOW MIN. DET. EXCEEDS 50%									10.0				
ARIZONA																
MARICOPA CO																
030440001 A01	25	10.0	NO. OF SAMPLES (25) BELOW MIN. DET. EXCEEDS 50%									10.0				
PHOENIX																
030400002 A01	26	10.0	NO. OF SAMPLES (26) BELOW MIN. DET. EXCEEDS 50%									10.0				
TUCSON																
030940001 A01	26	10.0	NO. OF SAMPLES (26) BELOW MIN. DET. EXCEEDS 50%									10.0				
ARKANSAS																
LITTLE ROCK																
041440001 A01	25	10.0	NO. OF SAMPLES (24) BELOW MIN. DET. EXCEEDS 50%									10.022				
TEXARKANA																
042560001 A01	5	10.0	NO. OF SAMPLES (24) BELOW MIN. DET. EXCEEDS 50%									10.022				
WEST MEMPHIS																
042740001 A01	26	10.0	NO. OF SAMPLES (26) BELOW MIN. DET. EXCEEDS 50%									10.0				
CALIFORNIA																
BURBANK																
050900001 A01	26	10.0	NO. OF SAMPLES (26) BELOW MIN. DET. EXCEEDS 50%									10.0				
GLENDALE																
052940001 A01	25	10.0	NO. OF SAMPLES (25) BELOW MIN. DET. EXCEEDS 50%									10.0				
LONG BEACH																
054100001 A01	26	10.0	NO. OF SAMPLES (26) BELOW MIN. DET. EXCEEDS 50%									10.0				
LOS ANGELES																
054140001 A01	26	10.0	NO. OF SAMPLES (24) BELOW MIN. DET. EXCEEDS 50%									10.0				
OAKLAND																
055370001 A01	25	10.0	NO. OF SAMPLES (24) BELOW MIN. DET. EXCEEDS 50%									10.014				
ONTARIO																
055490001 A01	24	10.0	NO. OF SAMPLES (21) BELOW MIN. DET. EXCEEDS 50%									10.017				
PASADENA																
055740001 A01	25	10.0	NO. OF SAMPLES (23) BELOW MIN. DET. EXCEEDS 50%									10.017				
RIVERSIDE																
056400001 A01	26	10.0	NO. OF SAMPLES (25) BELOW MIN. DET. EXCEEDS 50%									10.013				
SACRAMENTO																
056540001 A01	26	10.0	NO. OF SAMPLES (26) BELOW MIN. DET. EXCEEDS 50%									10.0				
SAN BERNARDINO																
056640001 A01	26	10.0	NO. OF SAMPLES (26) BELOW MIN. DET. EXCEEDS 50%									10.0				
SAN DIEGO																
056830001 A01	26	10.0	NO. OF SAMPLES (24) BELOW MIN. DET. EXCEEDS 50%									10.0				
SAN FRANCISCO																
056960001 A01	26	10.0	NO. OF SAMPLES (26) BELOW MIN. DET. EXCEEDS 50%									10.0				
COLORADO																
DENVER																
060580001 A01	24	10.0	NO. OF SAMPLES (24) BELOW MIN. DET. EXCEEDS 50%									10.0				
CONNECTICUT																
HARTFORD																
070420001 A01	26	10.0	NO. OF SAMPLES (26) BELOW MIN. DET. EXCEEDS 50%									10.0				
NEW HAVEN																
070720001 A01	26	10.0	NO. OF SAMPLES (25) BELOW MIN. DET. EXCEEDS 50%									10.012				
DELAWARE																
NEWSOM																
080140001 A01	24	10.0	NO. OF SAMPLES (24) BELOW MIN. DET. EXCEEDS 50%									10.0				
WILMINGTON																
083260001 A01	23	10.0	NO. OF SAMPLES (23) BELOW MIN. DET. EXCEEDS 50%									10.0				

Table 12-1 (continued). TiN, URBAN FREQUENCY DISTRIBUTIONS, 1968

($\mu g/m^3$)

LOCATION	NO. SAMP.	MIN.	FREQUENCY DISTRIBUTION, % 10	20	30	40	50	60	70	80	90	MAX.	ARITHMETIC MEAN	ARITHMETIC STD. DEV.	GEOMETRIC MEAN	GEOMETRIC STD. DEV.
DIST COLUMBIA																
WASHINGTON																
090370001 A01	26	0.0	NO. OF SAMPLES (26) BELOW MIN. DET. EXCEEDS 50%									0.0				
FLORIDA																
JACKSONVILLE																
101960002 A01	25	0.0	NO. OF SAMPLES (25) BELOW MIN. DET. EXCEEDS 50%									0.0				
FLORIDA																
TAMPA																
104390002 A01	29	0.0	NO. OF SAMPLES (17) BELOW MIN. DET. EXCEEDS 50%									0.045				
GEORGIA																
ATLANTA																
110230001 A01	26	0.0	NO. OF SAMPLES (23) BELOW MIN. DET. EXCEEDS 50%									0.020				
HAWAII																
HONOLULU																
120120001 A01	26	0.0	NO. OF SAMPLES (22) BELOW MIN. DET. EXCEEDS 50%									0.010				
IDAHO																
BOISE CITY																
130220001 A01	26	0.0	NO. OF SAMPLES (19) BELOW MIN. DET. EXCEEDS 50%									0.014				
ILLINOIS																
CHICAGO																
141220001 A01	25	0.0	0.0	0.0	0.0	0.012	0.014	0.015	0.017	0.021	0.023	0.032				
EAST ST LOUIS																
142120001 A01	25	0.0	NO. OF SAMPLES (19) BELOW MIN. DET. EXCEEDS 50%									0.079				
JOLIET																
144760001 A01	21	0.0	NO. OF SAMPLES (21) BELOW MIN. DET. EXCEEDS 50%									0.0				
ROCKFORD																
146480001 A01	25	0.0	NO. OF SAMPLES (17) BELOW MIN. DET. EXCEEDS 50%									0.029				
SPRINGFIELD																
147240001 A01	23	0.0	NO. OF SAMPLES (23) BELOW MIN. DET. EXCEEDS 50%									0.0				
INDIANA																
EAST CHICAGO																
151180001 A01	26	0.0	0.0	0.0	0.0	0.014	0.015	0.028	0.038	0.061	0.079	0.733				
HAMMOND																
151790001 A01	26	0.0	NO. OF SAMPLES (24) BELOW MIN. DET. EXCEEDS 50%									0.032				
INDIANAPOLIS																
152040001 A01	25	0.0	NO. OF SAMPLES (22) BELOW MIN. DET. EXCEEDS 50%									0.016				
SOUTH BEND																
153940001 A01	24	0.0	NO. OF SAMPLES (20) BELOW MIN. DET. EXCEEDS 50%									0.039				
IOWA																
CEDAR RAPIDS																
160640001 A01	25	0.0	NO. OF SAMPLES (24) BELOW MIN. DET. EXCEEDS 50%									0.0				
DES MOINES																
161190001 A01	24	0.0	NO. OF SAMPLES (24) BELOW MIN. DET. EXCEEDS 50%									0.0				
DUBUQUE																
161240001 A01	23	0.0	NO. OF SAMPLES (21) BELOW MIN. DET. EXCEEDS 50%									0.034				
KANSAS																
KANSAS CITY																
171870001 A01	25	0.0	NO. OF SAMPLES (22) BELOW MIN. DET. EXCEEDS 50%									0.014				
TOPEKA																
173560001 A01	24	0.0	NO. OF SAMPLES (20) BELOW MIN. DET. EXCEEDS 50%									0.0				
WICHITA																
173740001 A01	25	0.0	NO. OF SAMPLES (25) BELOW MIN. DET. EXCEEDS 50%									0.0				
KENTUCKY																
ASHLAND																
180080002 A01	23	0.0	NO. OF SAMPLES (22) BELOW MIN. DET. EXCEEDS 50%									0.051				
COVINGTON																
180910001 A01	25	0.0	NO. OF SAMPLES (23) BELOW MIN. DET. EXCEEDS 50%									0.014				
LEXINGTON																
182300301 A01	24	0.0	NO. OF SAMPLES (23) BELOW MIN. DET. EXCEEDS 50%									0.015				
LOUISVILLE																
182980001 A01	25	0.0	NO. OF SAMPLES (22) BELOW MIN. DET. EXCEEDS 50%									0.043				
LOUISIANA																
NEW ORLEANS																
192020002 A01	25	0.0	NO. OF SAMPLES (24) BELOW MIN. DET. EXCEEDS 50%									0.014				
MAINE																
PORTLAND																
200940002 A01	21	0.0	NO. OF SAMPLES (17) BELOW MIN. DET. EXCEEDS 50%									0.024				
MARYLAND																
BALTIMORE																
210120001 A01	26	0.0	NO. OF SAMPLES (25) BELOW MIN. DET. EXCEEDS 50%									0.030				

Table 12-1 (continued). TIN, URBAN FREQUENCY DISTRIBUTIONS, 1968

($\mu g/m^3$)

LOCATION	NO. SAMP.	MIN.	FREQUENCY DISTRIBUTION, %									MAX.	ARITHMETIC		GEOMETRIC	
			10	20	30	40	50	60	70	80	90		MEAN	STD. DEV.	MEAN	STD. DEV.
MASSACHUSETTS																
BOSTON																
220240001 A01	25	10.0	NO. OF SAMPLES (22) BELOW MIN. DET. EXCEEDS 50%									10.035				
WORCESTER																
222440001 A01	24	10.0	NO. OF SAMPLES (23) BELOW MIN. DET. EXCEEDS 50%									10.011				
MICHIGAN																
DETROIT																
231140001 A01	26	10.0	NO. OF SAMPLES (14) BELOW MIN. DET. EXCEEDS 50%									10.044				
FLINT																
233440001 A01	26	10.0	NO. OF SAMPLES (25) BELOW MIN. DET. EXCEEDS 50%									10.014				
GRAND RAPIDS																
234020001 A01	26	10.0	NO. OF SAMPLES (21) BELOW MIN. DET. EXCEEDS 50%									10.047				
TRENTON																
234170001 A01	25	10.0	NO. OF SAMPLES (24) BELOW MIN. DET. EXCEEDS 50%									10.015				
MINNESOTA																
DULUTH																
241040001 A01	25	10.0	NO. OF SAMPLES (23) BELOW MIN. DET. EXCEEDS 50%									10.0				
MINNEAPOLIS																
242240001 A01	26	10.0	NO. OF SAMPLES (26) BELOW MIN. DET. EXCEEDS 50%									10.0				
MOORHEAD																
242320001 A01	26	10.0	NO. OF SAMPLES (25) BELOW MIN. DET. EXCEEDS 50%									10.011				
ST PAUL																
243420001 A01	26	10.0	NO. OF SAMPLES (26) BELOW MIN. DET. EXCEEDS 50%									10.0				
MISSISSIPPI																
JACKSON																
251760002 A01	24	10.0	NO. OF SAMPLES (24) BELOW MIN. DET. EXCEEDS 50%									10.0				
MISSOURI																
KANSAS CITY																
262330001 A01	24	10.0	NO. OF SAMPLES (24) BELOW MIN. DET. EXCEEDS 50%									10.0				
MONTANA																
HELENA																
273720001 A01	24	10.0	NO. OF SAMPLES (24) BELOW MIN. DET. EXCEEDS 50%									10.0				
NEBRASKA																
OMAHA																
281440001 A01	25	10.0	NO. OF SAMPLES (23) BELOW MIN. DET. EXCEEDS 50%									10.047				
NEVADA																
LAS VEGAS																
290420001 A01	24	10.0	NO. OF SAMPLES (24) BELOW MIN. DET. EXCEEDS 50%									10.0				
RENO																
290480001 A01	25	10.0	NO. OF SAMPLES (25) BELOW MIN. DET. EXCEEDS 50%									10.0				
NEW HAMPSHIRE																
CONCORD																
300120001 A01	25	10.0	NO. OF SAMPLES (22) BELOW MIN. DET. EXCEEDS 50%									10.015				
NEW JERSEY																
BAYONNE																
310140001 A01	21	10.0	NO. OF SAMPLES (19) BELOW MIN. DET. EXCEEDS 50%									10.018				
BURLINGTON CO																
310660002 A01	24	10.0	NO. OF SAMPLES (24) BELOW MIN. DET. EXCEEDS 50%									10.038				
CAMDEN																
310720001 A01	26	10.0	NO. OF SAMPLES (17) BELOW MIN. DET. EXCEEDS 50%									10.063				
GLASSBORO																
311700001 A01	25	10.0	NO. OF SAMPLES (24) BELOW MIN. DET. EXCEEDS 50%									10.014				
HAMILTON																
311940001 A01	21	10.0	NO. OF SAMPLES (21) BELOW MIN. DET. EXCEEDS 50%									10.1				
JERSEY CITY																
312720001 A01	25	10.0	NO. OF SAMPLES (13) BELOW MIN. DET. EXCEEDS 50%									10.120				
NEWARK																
313480001 A01	24	10.0	NO. OF SAMPLES (19) BELOW MIN. DET. EXCEEDS 50%									10.048				
PATERSON																
314140001 A01	25	10.0	NO. OF SAMPLES (25) BELOW MIN. DET. EXCEEDS 50%									10.0				
PERTH AMBOY																
314220001 A01	26	10.0	NO. OF SAMPLES (25) BELOW MIN. DET. EXCEEDS 50%									10.016				
TRENTON																
315460001 A01	24	10.0	NO. OF SAMPLES (24) BELOW MIN. DET. EXCEEDS 50%									10.0				
NEW MEXICO																
ALBUQUERQUE																
320400001 A01	24	10.0	NO. OF SAMPLES (24) BELOW MIN. DET. EXCEEDS 50%									10.0				

Table 12-1 (continued). TIN, URBAN FREQUENCY DISTRIBUTIONS, 1968

($\mu g/m^3$)

LOCATION	NO. SAMP.	MIN.	FREQUENCY DISTRIBUTION, %									MAX.	ARITHMETIC		GEOMETRIC	
			10	20	30	40	50	60	70	80	90		MEAN	STD. DEV.	MEAN	STD. DEV.
NORTH CAROLINA																
CHARLOTTE																
340700001 A01	25	10.0	NO. OF SAMPLES (25) BELOW MIN. DET. EXCEEDS 50%									10.0				
DURHAM																
341160001 A01	23	10.0	NO. OF SAMPLES (23) BELOW MIN. DET. EXCEEDS 50%									10.0				
NORTH DAKOTA																
BISMARCK																
350100001 A01	25	10.0	NO. OF SAMPLES (25) BELOW MIN. DET. EXCEEDS 50%									10.0				
OHIO																
AKRON																
360040001 A01	25	10.0	NO. OF SAMPLES (25) BELOW MIN. DET. EXCEEDS 50%									10.0				
CINCINNATI																
361220001 A01	26	10.0	NO. OF SAMPLES (24) BELOW MIN. DET. EXCEEDS 50%									10.059				
CLEVELAND																
361300001 A01	26	10.0	NO. OF SAMPLES (24) BELOW MIN. DET. EXCEEDS 50%									10.028				
COLUMBUS																
361460001 A01	24	10.0	NO. OF SAMPLES (24) BELOW MIN. DET. EXCEEDS 50%									10.0				
DAYTON																
361660001 A01	26	10.0	NO. OF SAMPLES (26) BELOW MIN. DET. EXCEEDS 50%									10.0				
TOLEDO																
366600001 A01	24	10.0	NO. OF SAMPLES (22) BELOW MIN. DET. EXCEEDS 50%									10.012				
YOUNGSTOWN																
367760001 A01	25	10.0	NO. OF SAMPLES (25) BELOW MIN. DET. EXCEEDS 50%									10.0				
OKLAHOMA																
OKLAHOMA CITY																
372200001 A01	22	10.0	NO. OF SAMPLES (22) BELOW MIN. DET. EXCEEDS 50%									10.0				
TULSA																
373000001 A01	24	10.0	NO. OF SAMPLES (24) BELOW MIN. DET. EXCEEDS 50%									10.0				
OREGON																
MEDFORD																
3911A0001 A01	25	10.0	NO. OF SAMPLES (25) BELOW MIN. DET. EXCEEDS 50%									10.0				
PORTLAND																
391460001 A01	26	10.0	NO. OF SAMPLES (25) BELOW MIN. DET. EXCEEDS 50%									10.015				
PENNSYLVANIA																
ALLENTOWN																
390120001 A01	26	10.0	NO. OF SAMPLES (24) BELOW MIN. DET. EXCEEDS 50%									10.024				
ALTOONA																
390140001 A01	23	10.0	NO. OF SAMPLES (23) BELOW MIN. DET. EXCEEDS 50%									10.0				
BETHLEHEM																
390780002 A01	24	10.0	NO. OF SAMPLES (21) BELOW MIN. DET. EXCEEDS 50%									10.019				
HARRISBURG																
393480001 A01	26	10.0	NO. OF SAMPLES (23) BELOW MIN. DET. EXCEEDS 50%									10.091				
HAZLETON																
393960001 A01	24	10.0	NO. OF SAMPLES (23) BELOW MIN. DET. EXCEEDS 50%									10.014				
JOHNSTOWN																
394460001 A01	23	10.0	NO. OF SAMPLES (21) BELOW MIN. DET. EXCEEDS 50%									10.023				
PHILADELPHIA																
397140001 A01	26	10.0	NO. OF SAMPLES (21) BELOW MIN. DET. EXCEEDS 50%									10.190				
PITTSBURGH																
397760001 A01	26	10.0	NO. OF SAMPLES (24) BELOW MIN. DET. EXCEEDS 50%									10.027				
READING																
397620001 A01	25	10.0	NO. OF SAMPLES (22) BELOW MIN. DET. EXCEEDS 50%									10.020				
SCRANTON																
398040001 A01	25	10.0	NO. OF SAMPLES (23) BELOW MIN. DET. EXCEEDS 50%									10.033				
WARMINSTER																
399160001 A01	25	10.0	NO. OF SAMPLES (25) BELOW MIN. DET. EXCEEDS 50%									10.0				
WEST CHESTER																
399280001 A01	24	10.0	NO. OF SAMPLES (24) BELOW MIN. DET. EXCEEDS 50%									10.0				
WILKES-BARRE																
399430001 A01	24	10.0	NO. OF SAMPLES (24) BELOW MIN. DET. EXCEEDS 50%									10.0				
YORK																
399560001 A01	25	10.0	NO. OF SAMPLES (25) BELOW MIN. DET. EXCEEDS 50%									10.0				
PUERTO RICO																
BAYAMON																
400340001 A01	25	10.0	NO. OF SAMPLES (25) BELOW MIN. DET. EXCEEDS 50%									10.0				
CATANO																
400560001 A01	25	10.0	NO. OF SAMPLES (25) BELOW MIN. DET. EXCEEDS 50%									10.0				

Table 12-1 (continued). TIN, URBAN FREQUENCY DISTRIBUTIONS, 1968

($\mu g/m^3$)

LOCATION	NO. SAMP.	MIN.	FREQUENCY DISTRIBUTION, %									MAX.	ARITHMETIC MEAN	ARITHMETIC STD. DEV.	GEOMETRIC MEAN	GEOMETRIC STD. DEV.
			10	20	30	40	50	60	70	80	90					
PUERTO RICO																
GUAYANILLA																
401090001 A01	25	10.0	NO. OF SAMPLES			24) BELOW MIN. DET.			EXCEEDS 50%			10.011				
PONCE																
401920001 A01	25	10.0	NO. OF SAMPLES			25) BELOW MIN. DET.			EXCEEDS 50%			10.0				
RHODE ISLAND																
EAST PROVIDENCE																
410120001 A01	26	10.0	NO. OF SAMPLES			25) BELOW MIN. DET.			EXCEEDS 50%			10.026				
PROVIDENCE																
410960001 A01	25	10.0	NO. OF SAMPLES			21) BELOW MIN. DET.			EXCEEDS 50%			10.016				
SOUTH CAROLINA																
COLUMBIA																
420760001 A01	24	10.0	NO. OF SAMPLES			24) BELOW MIN. DET.			EXCEEDS 50%			10.0				
GREENVILLE																
421140001 A01	25	10.0	NO. OF SAMPLES			25) BELOW MIN. DET.			EXCEEDS 50%			10.0				
SOUTH DAKOTA																
SIOUX FALLS																
431400001 A01	22	10.0	NO. OF SAMPLES			22) BELOW MIN. DET.			EXCEEDS 50%			10.0				
TENNESSEE																
CHATTANOOGA																
440940001 A01	25	10.0	NO. OF SAMPLES			24) BELOW MIN. DET.			EXCEEDS 50%			10.020				
KNOXVILLE																
441740001 A01	26	10.0	NO. OF SAMPLES			25) BELOW MIN. DET.			EXCEEDS 50%			10.014				
MEMPHIS																
442140001 A01	25	10.0	NO. OF SAMPLES			25) BELOW MIN. DET.			EXCEEDS 50%			10.0				
NASHVILLE																
442540001 A01	25	10.0	NO. OF SAMPLES			25) BELOW MIN. DET.			EXCEEDS 50%			10.0				
TEXAS																
DALLAS																
451310001 A01	26	10.0	NO. OF SAMPLES			25) BELOW MIN. DET.			EXCEEDS 50%			10.047				
HOUSTON																
452960001 A01	26	10.0	NO. OF SAMPLES			13) BELOW MIN. DET.			EXCEEDS 50%			10.037				
PASADENA																
454060001 A01	26	10.0	NO. OF SAMPLES			14) BELOW MIN. DET.			EXCEEDS 50%			10.042				
SAN ANTONIO																
456720001 A01	25	10.0	NO. OF SAMPLES			25) BELOW MIN. DET.			EXCEEDS 50%			10.0				
UTAH																
OGDEN																
460480001 A01	25	10.0	NO. OF SAMPLES			25) BELOW MIN. DET.			EXCEEDS 50%			10.0				
SALT LAKE CITY																
460920001 A01	26	10.0	NO. OF SAMPLES			26) BELOW MIN. DET.			EXCEEDS 50%			10.0				
VERMONT																
BURLINGTON																
470140001 A01	24	10.0	NO. OF SAMPLES			24) BELOW MIN. DET.			EXCEEDS 50%			10.0				
VIRGINIA																
DANVILLE																
480920001 A01	25	10.0	NO. OF SAMPLES			25) BELOW MIN. DET.			EXCEEDS 50%			10.0				
HAMPTON																
481440001 A01	25	10.0	NO. OF SAMPLES			25) BELOW MIN. DET.			EXCEEDS 50%			10.0				
LYNCHBURG																
481940001 A01	26	10.0	NO. OF SAMPLES			22) BELOW MIN. DET.			EXCEEDS 50%			10.047				
NORFOLK																
482140001 A01	26	10.0	NO. OF SAMPLES			25) BELOW MIN. DET.			EXCEEDS 50%			10.047				
PORTSMOUTH																
482440001 A01	26	10.0	NO. OF SAMPLES			26) BELOW MIN. DET.			EXCEEDS 50%			10.0				
RICHMOND																
482660001 A01	26	10.0	NO. OF SAMPLES			25) BELOW MIN. DET.			EXCEEDS 50%			10.036				
ROANOKE																
482700001 A01	24	10.0	NO. OF SAMPLES			25) BELOW MIN. DET.			EXCEEDS 50%			10.0				
WASHINGTON																
SEATTLE																
491940001 A01	26	10.0	NO. OF SAMPLES			26) BELOW MIN. DET.			EXCEEDS 50%			10.0				
WEST VIRGINIA																
CHARLESTON																
500240001 A01	26	10.0	NO. OF SAMPLES			25) BELOW MIN. DET.			EXCEEDS 50%			10.017				
WISCONSIN																
EAU CLAIRE																
510840001 A01	24	10.0	NO. OF SAMPLES			24) BELOW MIN. DET.			EXCEEDS 50%			10.0				

Table 12-1 (continued). TIN, URBAN FREQUENCY DISTRIBUTIONS, 1968

($\mu g/m^3$)

LOCATION	NO. SAMP.	MIN.	FREQUENCY DISTRIBUTION, %								MAX.	ARITHMETIC		GEOMETRIC	
			10	20	30	40	50	60	70	80	90		MEAN	STD. DEV.	MEAN	STD. DEV.
WISCONSIN																
KENOSHA																
511940001 A01	25	10.0	NO. OF SAMPLES EQUAL OR BELOW MIN. DET. EXCEEDS 50%									10.0				
MADISON																
511960001 A01	25	10.0	NO. OF SAMPLES EQUAL OR BELOW MIN. DET. EXCEEDS 50%									10.0				
MILWAUKEE																
512700001 A01	25	10.0	NO. OF SAMPLES EQUAL OR BELOW MIN. DET. EXCEEDS 50%									10.0				
SUPERIOR																
513940001 A01	23	10.0	NO. OF SAMPLES EQUAL OR BELOW MIN. DET. EXCEEDS 50%									10.0				
WYOMING																
CASPER																
520120001 A01	26	10.0	NO. OF SAMPLES EQUAL OR BELOW MIN. DET. EXCEEDS 50%									10.0				
CHEYENNE																
520140001 A01	26	10.0	NO. OF SAMPLES EQUAL OR BELOW MIN. DET. EXCEEDS 50%									10.0				

Table 12-2. TIN, NONURBAN FREQUENCY DISTRIBUTIONS, 1968

($\mu g/m^3$)

LOCATION	NO. SAMP.	MIN.	FREQUENCY DISTRIBUTION, % 10	20	30	40	50	60	70	80	90	MAX.	ARITHMETIC MEAN	ARITHMETIC STD. DEV.	GEOMETRIC MEAN	GEOMETRIC STD. DEV.
ARIZONA																
GRAND CANYON NAT PI																
040270001 A03	25	1.0	NO. OF SAMPLES (25) BELOW MIN. DET. EXCEEDS 50%									1.0				
ARKANSAS																
MONTGOMERY CO																
041760001 A03	25	1.0	NO. OF SAMPLES (25) BELOW MIN. DET. EXCEEDS 50%									1.0				
CALIFORNIA																
HUMBOLDT CO																
053300001 A03	26	1.0	NO. OF SAMPLES (26) BELOW MIN. DET. EXCEEDS 50%									1.0				
COLORADO																
MESA VERDE NAT PSR																
051930002 A03	21	1.0	NO. OF SAMPLES (21) BELOW MIN. DET. EXCEEDS 50%									1.0				
DELAWARE																
KENT CO																
030040001 A03	24	1.0	NO. OF SAMPLES (22) BELOW MIN. DET. EXCEEDS 50%									1.0061				
IDAHO																
BUTTE CO																
130140001 A03	24	1.0	NO. OF SAMPLES (24) BELOW MIN. DET. EXCEEDS 50%									1.0				
INDIANA																
MONROE CO																
152400001 A03	24	1.0	NO. OF SAMPLES (24) BELOW MIN. DET. EXCEEDS 50%									1.0				
PARKE CO																
153760001 A03	25	1.0	NO. OF SAMPLES (25) BELOW MIN. DET. EXCEEDS 50%									1.0				
MAINE																
ACADIA NAT PARK																
030010001 A03	26	1.0	NO. OF SAMPLES (26) BELOW MIN. DET. EXCEEDS 50%									1.0067				
MARYLAND																
CALVERT CO																
015700301 A03	23	1.0	NO. OF SAMPLES (19) BELOW MIN. DET. EXCEEDS 50%									1.0063				
MISSISSIPPI																
JACKSON CO																
251240001 A03	24	1.0	NO. OF SAMPLES (20) BELOW MIN. DET. EXCEEDS 50%									1.0050				
MISSOURI																
SHANNON CO																
264480001 A03	25	1.0	NO. OF SAMPLES (25) BELOW MIN. DET. EXCEEDS 50%									1.0				
MONTANA																
GLACIER NAT PARK																
270570001 A03	25	1.0	1.0	1.0	1.0	1.0	1.0046	1.0051	1.0059	1.0068	1.0087	1.0107				
NEBRASKA																
THOMAS CO																
282490001 A03	24	1.0	1.0	1.0	1.0	1.0	1.0	1.0050	1.0054	1.0064	1.0066	1.0100				
NEVADA																
WHITE PINE CO																
290560001 A03	26	1.0	1.0	1.0	1.0046	1.0120	1.0120	1.0120	1.0130	1.0140	1.0150	1.0170	1.0097	0.011	1.0044	6.82
NEW HAMPSHIRE																
COOS CO																
300140001 A03	23	1.0070	1.0075	1.0079	1.0084	1.0094	1.0110	1.0110	1.0120	1.0130	1.0160	1.0250	1.0112	0.001	1.0107	1.36
NEW YORK																
JEFFERSON CO																
333340001 A03	26	1.0060	1.0064	1.0067	1.0068	1.0072	1.0076	1.0077	1.0081	1.0084	1.0100	1.0130	1.0074	0.001	1.0073	1.26
NORTH CAROLINA																
CAPE HATTERAS NAT																
340490001 A03	25	1.0	NO. OF SAMPLES (16) BELOW MIN. DET. EXCEEDS 50%									1.0087				
OKLAHOMA																
CHEROKEE CO																
370490001 A03	25	1.0	NO. OF SAMPLES (23) BELOW MIN. DET. EXCEEDS 50%									1.0046				
OREGON																
CURRY CO																
390440001 A03	26	1.0	NO. OF SAMPLES (21) BELOW MIN. DET. EXCEEDS 50%									1.0049				
PENNSYLVANIA																
CLARION CO																
141740001 A03	25	1.0	NO. OF SAMPLES (23) BELOW MIN. DET. EXCEEDS 50%									1.0063				
RHODE ISLAND																
WASHINGTON CO																
410440001 A03	26	1.0	NO. OF SAMPLES (22) BELOW MIN. DET. EXCEEDS 50%									1.0080				
SOUTH CAROLINA																
RICHLAND CO																
421990001 A03	23	1.0	NO. OF SAMPLES (23) BELOW MIN. DET. EXCEEDS 50%									1.0				
SOUTH DAKOTA																
BLACK HILLS NAT FO																
440110001 A03	26	1.0	NO. OF SAMPLES (24) BELOW MIN. DET. EXCEEDS 50%									1.0				

Table 12-2 (continued). TIN, NONURBAN FREQUENCY DISTRIBUTIONS, 1968

($\mu g/m^3$)

LOCATION	NO. SAMP.	MIN.	FREQUENCY DISTRIBUTION, %									MAX.	ARITHMETIC MEAN	ARITHMETIC STD. DEV.	GEOMETRIC MEAN	GEOMETRIC STD. DEV.
			10	20	30	40	50	60	70	80	90					
TEXAS																
PATAGONIA CC 483530001 A03	25	.0	NO. OF SAMPLES (22) BELOW MIN. DET. EXCEEDS 50%									.0043				
VERMONT																
ORANGE CO 470360001 A03	26	.0	NO. OF SAMPLES (25) BELOW MIN. DET. EXCEEDS 50%									.0058				
VIRGINIA																
SHENANDOAH NAT PAR 482990001 A03	26	.0	NO. OF SAMPLES (25) BELOW MIN. DET. EXCEEDS 50%									.0043				
WYOMING																
YELLOWSTONE NAT PA 560360001 A03	26	.0	NO. OF SAMPLES (26) BELOW MIN. DET. EXCEEDS 50%									.0				

Table 12-3. TIN, URBAN QUARTERLY COMPOSITES AND YEARLY AVERAGES, 1969

($\mu g/m^3$)

LOCATION	1ST QTR.	2ND QTR.	3RD QTR.	4TH QTR.	YR. AVG.
ALABAMA					
BIRMINGHAM					
010740001 A01	10.0	10.0	10.0	10.0	*****
HUNTSVILLE					
011140001 A01	10.0	10.0	10.0	10.0	*****
MOBILE					
012340001 A01	10.0	10.0	10.0	10.053	*****
MONTGOMERY					
012540001 A01	10.0	10.026	10.0	10.0	*****
ALASKA					
ANCHORAGE					
020140001 A01	10.0	10.0	10.0	10.0	*****
FAIRBANKS					
020340001 A01	10.0	10.0	10.0	10.049	*****
ARIZONA					
MARICOPA CO					
030440001 A01	10.0	10.0	10.0	10.0	*****
PHOENIX					
030640002 A01	10.0	10.0	10.0	10.0	*****
TUCSON					
030840001 A01	10.039	10.0	10.0	10.0	*****
ARKANSAS					
LITTLE ROCK					
041440001 A01	10.0	10.0	10.0	10.0	*****
TEXARKANA					
042540001 A01	10.0	0.0	10.0	10.0	*****
WEST MEMPHIS					
042740001 A01	10.0	10.0	10.0	10.0	*****
CALIFORNIA					
ANAHEIM					
050730001 A01	10.0	10.0	10.0	10.0	*****
BURBANK					
050930001 A01	10.0	10.0	10.0	10.0	*****
FRESNO					
051900001 A01	10.0	10.0	10.0	10.0	*****
GLENDALE					
052040001 A01	10.0	10.0	10.0	10.0	*****
LONG BEACH					
052700001 A01	10.0	10.0	10.0	10.0	*****
LOS ANGELES					
052740001 A01	10.0	10.0	10.021	10.0	*****
OAKLAND					
053300001 A01	10.036	10.0	10.031	10.019	10.022
ONTARIO					
053380001 A01	10.0	10.0	10.014	10.0	*****
RIVERSIDE					
054400001 A01	10.013	10.0	10.0	10.0	*****
SACRAMENTO					
054540001 A01	10.015	10.019	10.0	10.018	10.013
SAN BERNARDINO					
054640001 A01	10.014	10.015	10.014	10.021	10.017
SAN DIEGO					
054800001 A01	10.0	10.015	10.0	10.0	*****
SAN FRANCISCO					
054840001 A01	10.025	10.023	10.018	10.022	10.022
SAN JOSE					
054880001 A01	10.015	10.018	10.019	10.019	10.018
SANTA ANA					
054180001 A01	10.015	10.016	10.018	10.024	10.018
TORRANCE					
055240001 A01	10.017	10.0	10.0	10.023	*****
COLORADO					
DENVER					
060580001 A01	10.0	10.016	10.027	10.0	*****

LOCATION	1ST QTR.	2ND QTR.	3RD QTR.	4TH QTR.	YR. AVG.
COLORADO (CONT)					
WHITEZIMA CO					
061400001 A01	10.0	10.0	10.0	10.0	*****
CONNECTICUT					
BRIDGEPORT					
070040001 A01	10.0	10.023	10.022	10.017	10.016
HARTFORD					
070420001 A01	10.017	10.0	10.016	10.013	10.012
NEW HAVEN					
070700001 A01	10.021	10.019	10.018	10.020	10.019
WATERBURY					
071240001 A01	10.0	10.024	10.014	10.0	*****
DELAWARE					
WILMINGTON					
080240001 A01	10.020	10.0	10.021	10.021	10.016
DIST COLUMBIA					
WASHINGTON					
090370001 A01	10.0	10.0	10.0	10.027	*****
FLORIDA					
JACKSONVILLE					
101240001 A01	10.0	10.0	10.0	10.0	*****
MIAMI					
102700001 A01	10.0	10.017	10.022	10.0	*****
ST PETERSBURG					
103480002 A01	10.018	10.017	10.010	10.014	10.015
TAMPA					
104260002 A01	10.030	10.024	10.019	10.0	10.019
GEORGIA					
ATLANTA					
111200001 A01	10.0	10.0	10.024	10.067	*****
COLUMBUS					
111380001 A01	10.0	10.0	10.0	10.0	*****
SAVANNAH					
114650001 A01	10.0	10.0	10.0	10.0	*****
HAWAII					
HONOLULU					
120120001 A01	10.0	10.0	10.0	10.0	*****
IDAHO					
BOISE CITY					
130220001 A01	10.0	10.0	10.0	10.0	*****
ILLINOIS					
CHICAGO					
141210001 A01	10.043	10.0	10.017	10.033	10.023
EAST ST LOUIS					
141310001 A01	10.0	10.018	10.0	10.0	*****
JOLIET					
142740001 A01	10.0	10.0	10.0	10.025	*****
NORTH CHICAGO					
144620002 A01	10.027	10.025	10.0	10.0	*****
PEORIA					
144800001 A01	10.0	10.0	10.0	10.0	*****
ROCKFORD					
144880001 A01	10.015	10.023	10.0	10.0	*****
SPRINGFIELD					
147090001 A01	10.0	10.0	10.0	10.0	*****
INDIANA					
EAST CHICAGO					
151180001 A01	10.130	10.140	10.150	10.061	10.120
EVANSVILLE					
151380001 A01	10.0	10.0	10.0	10.0	*****
FORT WAYNE					
151580001 A01	10.0	10.0	10.0	10.0	*****
GARY					
151520001 A01	10.024	10.0	10.0	10.017	*****

Table 12-3 (continued). TIN, URBAN QUARTERLY COMPOSITES AND YEARLY AVERAGES, 1969

($\mu g/m^3$)

LOCATION	1ST QTR.	2ND QTR.	3RD QTR.	4TH QTR.	YR. AVG.
ALABAMA					
BIRMINGHAM					
2411700301 A01	0.018	0.0	0.030	0.030	0.017
ANNISTON					
2410360301 A01	0.0	0.0	0.015	0.0	*****
NEW ORLEANS					
2422960301 A01	0.0	0.0	0.0	0.0	*****
SOUTH BEND					
2433800001 A01	0.032	0.0	0.0	0.017	*****
ROSE HAVEN					
2462400001 A01	0.0	0.0	0.0	0.0	*****
ARIZONA					
PHOENIX					
3401000301 A01	0.0	0.0	0.0	0.0	*****
TUCSON					
3403000301 A01	0.0	0.0	0.0	0.0	*****
ARKANSAS					
LITTLE ROCK					
3512400301 A01	0.033	0.016	0.0	0.0	*****
CALIFORNIA					
LOS ANGELES					
3611000301 A01	0.0	0.0	0.0	0.020	*****
FRESNO					
3626000301 A01	0.0	0.0	0.0	0.0	*****
MODESTO					
3737400301 A01	0.0	0.0	0.0	0.0	*****
COLORADO					
DENVER					
3808400301 A01	0.018	0.0	0.018	0.018	0.014
COVINGTON					
3812000301 A01	0.034	0.030	0.0	0.017	0.018
FAIRFIELD					
3829400301 A01	0.034	0.0	0.020	0.0	*****
DISTRICT OF COLUMBIA					
NATIONAL BRIDGE					
3903300301 A01	0.0	0.0	0.0	0.0	*****
NEW ORLEANS					
3922000301 A01	0.0	0.0	0.0	0.017	*****
SHREVEPORT					
3937400301 A01	0.0	0.0	0.0	0.0	*****
MARYLAND					
BALTIMORE					
4102300301 A01	0.020	0.0	0.0	0.0	*****
MASSACHUSETTS					
BOSTON					
4202400301 A01	0.024	0.024	0.015	0.022	0.023
FALL RIVER					
4204000301 A01	0.018	0.015	0.0	0.014	0.012
SPRINGFIELD					
4213000301 A01	0.017	0.017	0.015	0.013	0.014
WORCHESTER					
4224400301 A01	0.0	0.0	0.0	0.0	*****
MICHIGAN					
DEARBORN					
4311400301 A01	0.031	0.018	0.024	0.0	0.018
DETROIT					
4313400301 A01	0.0	0.031	0.032	0.030	0.026
FLINT					
4314000301 A01	0.0	0.0	0.0	0.0	*****
GRAND RAPIDS					
4314200301 A01	0.015	0.047	0.017	0.015	0.029
LANSING					
4324400301 A01	0.0	0.0	0.0	0.0	*****
SAGINAW					
4347400301 A01	0.0	0.0	0.0	0.0	*****

LOCATION	1ST QTR.	2ND QTR.	3RD QTR.	4TH QTR.	YR. AVG.
MICHIGAN (CONT)					
TRENTON					
4381700301 A01	0.0	0.0	0.0	0.0	*****
MINNESOTA					
DULUTH					
4612400301 A01	0.0	0.0	0.0	0.0	*****
MINNEAPOLIS					
4627400301 A01	0.0	0.0	0.0	0.0	*****
ST PAUL					
4643000301 A01	0.0	0.0	0.0	0.0	*****
MISSOURI					
KANSAS CITY					
4738000301 A01	0.0	0.0	0.0	0.0	*****
ST LOUIS					
4642800301 A01	0.023	0.020	0.022	0.0	0.018
MONTANA					
HELENA					
4707200301 A01	0.019	0.0	0.0	0.0	*****
NEBRASKA					
OMAHA					
4814000301 A01	0.0	0.0	0.0	0.0	*****
NEVADA					
LAS VEGAS					
2900300001 A01	0.0	0.0	0.0	0.0	*****
RENO					
2904000001 A01	0.0	0.0	0.0	0.0	*****
NEW HAMPSHIRE					
CONCORD					
3010200301 A01	0.0	0.0	0.0	0.0	*****
NEW JERSEY					
HUDLINGTON CO					
3106400001 A01	0.015	0.0	0.0	0.014	*****
ELIZABETH					
3112000001 A01	0.014	0.019	0.013	0.0	0.012
GLASSBORO					
3117000001 A01	0.017	0.0	0.0	0.0	*****
HAMILTON					
3110600101 A01	0.0	0.0	0.014	0.0	*****
JERSEY CITY					
3123000001 A01	0.025	0.022	0.025	0.020	0.023
NEWARK					
3134000301 A01	0.031	0.031	0.036	0.025	0.031
PATERSON					
3141400001 A01	0.021	0.0	0.0	0.0	*****
PERTH AMBOY					
3147200301 A01	0.051	0.022	0.022	0.016	0.028
TRENTON					
3154000001 A01	0.0	0.016	0.016	0.0	*****
NEW MEXICO					
ALBUQUERQUE					
3200600001 A01	0.0	0.0	0.0	0.0	*****
NEW YORK					
ALBANY					
3300600301 A01	0.0	0.0	0.0	0.0	*****
BUFFALO					
3304400301 A01	0.0	0.016	0.0	0.0	*****
NEW YORK CITY					
3364000001 A01	0.044	0.039	0.0	0.033	0.029
NIAGARA FALLS					
3347400001 A01	0.0	0.0	0.0	0.0	*****
ROCHESTER					
3357400301 A01	0.0	0.0	0.0	0.0	*****
SYRACUSE					
3366200301 A01	0.0	0.0	0.0	0.0	*****

Table 12-3 (continued). TIN, URBAN QUARTERLY COMPOSITES AND YEARLY AVERAGES, 1969

($\mu g/m^3$)

LOCATION	1ST QTR.	2ND QTR.	3RD QTR.	4TH QTR.	YR. AVG.
NEW YORK					
UTICA					
336880001 A01	0.019	0.0	0.0	0.016	*****
NORTH CAROLINA					
CHARLOTTE					
340730001 A01	0.317	0.3	0.0	0.0	*****
DURHAM					
341160001 A01	0.0	0.0	0.0	0.0	*****
GREENSBORO					
341760001 A01	0.0	0.0	0.0	0.0	*****
WINSTON-SALEM					
344460002 A01	0.0	0.0	0.0	0.0	*****
NORTH DAKOTA					
BISMARCK					
350130001 A01	0.0	0.0	0.0	0.0	*****
OHIO					
AKRON					
360060001 A01	0.0	0.0	0.0	0.0	*****
CANTON					
360090001 A01	0.0	0.0	0.0	0.0	*****
CINCINNATI					
361230001 A01	0.037	0.0	0.031	0.039	0.027
CLEVELAND					
361410001 A01	0.0	0.026	0.0	0.0	*****
COLUMBUS					
361640001 A01	0.0	0.0	0.0	0.0	*****
DAYTON					
361440001 A01	0.0	0.0	0.0	0.0	*****
TOLEDO					
364600001 A01	0.0	0.0	0.0	0.0	*****
YOUNGSTOWN					
367760001 A01	0.0	0.0	0.0	0.0	*****
OKLAHOMA					
OKLAHOMA CITY					
372720001 A01	0.0	0.0	0.0	0.0	*****
TULSA					
373000001 A01	0.0	0.0	0.0	0.016	*****
OREGON					
MEDFORD					
381160001 A01	0.0	0.0	0.0	0.0	*****
PORTLAND					
381460001 A01	0.0	0.0	0.0	0.0	*****
PENNSYLVANIA					
ALLENTOWN					
390130001 A01	0.0	0.0	0.0	0.0	*****
ARMLSHEW					
390780002 A01	0.0	0.0	0.0	0.0	*****
ERIE					
391940002 A01	0.0	0.0	0.0	0.0	*****
HARRISBURG					
392480001 A01	0.0	0.0	0.0	0.0	*****
HAZLETON					
392940001 A01	0.0	0.0	0.0	0.0	*****
JOHNSTOWN					
394660001 A01	0.0	0.0	0.0	0.0	*****
PHILADELPHIA					
397140001 A01	0.0	0.029	0.050	0.044	0.030
PITTSBURGH					
397260001 A01	0.0	0.0	0.0	0.0	*****
READING					
397620001 A01	0.019	0.0	0.0	0.0	*****
SCRANTON					
398240001 A01	0.0	0.0	0.0	0.0	*****
WARMINSTER					
399140001 A01	0.0	0.012	0.0	0.011	*****

LOCATION	1ST QTR.	2ND QTR.	3RD QTR.	4TH QTR.	YR. AVG.
399880001 (COAT)					
WEST CHESTER					
399780001 A01	0.0	0.0	0.0	0.0	*****
WILKES-BARRE					
399430001 A01	0.0	0.0	0.0	0.0	*****
YORK					
399540001 A01	0.0	0.0	0.0	0.0	*****
PUERTO RICO					
BAYAMON					
400880001 A01	0.0	0.0	0.0	0.0	*****
CATANO					
400540002 A01	0.0	0.0	0.0	0.0	*****
GUAYANILLA					
401040001 A01	0.0	0.0	0.0	0.0	*****
PONCE					
401280001 A01	0.0	0.0	0.0	0.0	*****
SAN JUAN					
401740001 A01	0.0	0.0	0.0	0.0	*****
RHODE ISLAND					
EAST PROVIDENCE					
410520001 A01	0.0	0.0	0.0	0.0	*****
PROVIDENCE					
410300001 A01	0.0	0.0	0.0	0.0	*****
SOUTH CAROLINA					
COLUMBIA					
420740001 A01	0.0	0.0	0.0	0.0	*****
GREENVILLE					
421140001 A01	0.0	0.0	0.0	0.0	*****
TENNESSEE					
CHATTANOOGA					
440780001 A01	0.014	0.036	0.0	0.0	*****
KNOXVILLE					
441740001 A01	0.0	0.0	0.0	0.0	*****
MEMPHIS					
442340001 A01	0.0	0.0	0.0	0.0	*****
NASHVILLE					
442540001 A01	0.0	0.0	0.0	0.0	*****
TEXAS					
DALLAS					
451310001 A01	0.014	0.0	0.0	0.007	*****
EL PASO					
451720001 A01	0.058	0.051	0.040	0.059	0.047
FORT WORTH					
451980001 A01	0.0	0.0	0.0	0.0	*****
HOUSTON					
452360001 A01	0.0	0.0	0.0	0.014	*****
PASADENA					
452430001 A01	0.0	0.0	0.0	0.0	*****
SAN ANTONIO					
454570301 A01	0.0	0.0	0.0	0.0	*****
UTAH					
OGDEN					
460480001 A01	0.0	0.0	0.0	0.0	*****
SALT LAKE CITY					
460030001 A01	0.050	0.0	0.0	0.0	*****
VERMONT					
BURLINGTON					
470140001 A01	0.0	0.0	0.0	0.0	*****
VIRGINIA					
DANVILLE					
480980001 A01	0.0	0.0	0.0	0.0	*****
NEWPORT					
481440001 A01	0.0	0.0	0.0	0.0	*****

Table 12-3 (continued). TIN, URBAN QUARTERLY COMPOSITES AND YEARLY AVERAGES, 1969

($\mu g/m^3$)

LOCATION	1ST QTR.	2ND QTR.	3RD QTR.	4TH QTR.	YR. AVG.
VIRGINIA					
LYNCHBURG					
441940001 A01	0.014	0.033	0.047	0.143	0.059
NEWPORT NEWS					
442120001 A01	0.0	0.0	0.014	0.015	*****
PETERSBURG					
442140001 A01	0.0	0.0	0.0	0.0	*****
PORTSMOUTH					
442440001 A01	0.017	0.0	0.019	0.015	0.012
RICHMOND					
442660001 A01	0.0	0.0	0.020	0.017	*****
ROANOKE					
442720001 A01	0.0	0.020	0.0	0.017	*****
WASHINGTON					
SEATTLE					
531440001 A01	0.0	0.0	0.0	0.0	*****
SPOKANE					
532040001 A01	0.0	0.0	0.0	0.0	*****
TACOMA					
532140001 A01	0.0	0.0	0.0	0.0	*****

LOCATION	1ST QTR.	2ND QTR.	3RD QTR.	4TH QTR.	YR. AVG.
WEST VIRGINIA					
CHARLESTON					
540280001 A01	0.0	0.0	0.0	0.0	*****
WISCONSIN					
EAU CLAIRE					
551940001 A01	0.0	0.0	0.0	0.0	*****
KENOSHA					
552340001 A01	0.0	0.019	0.014	0.017	0.012
MADISON					
552460001 A01	0.0	0.0	0.013	0.0	*****
MILWAUKEE					
552700001 A01	0.0	0.016	0.015	0.020	0.013
RACINE					
552940001 A01	0.0	0.013	0.029	0.013	0.014
SUPERIOR					
553480001 A01	0.0	0.0	0.0	0.0	*****
WYOMING					
CASPER					
560120001 A01	0.0	0.0	0.0	0.0	*****
CHEYENNE					
560140001 A01	0.0	0.0	0.0	0.0	*****

Table 12-4. TIN, NONURBAN QUARTERLY COMPOSITES AND YEARLY AVERAGES, 1969

($\mu g/m^3$)

LOCATION	1ST QTR.	2ND QTR.	3RD QTR.	4TH QTR.	YR. AVG.
ARIZONA					
GRAND CANYON NAT PI					
040470001 A03	1.0	1.0	1.0	1.0	*****
ARKANSAS					
MONTGOMERY CO					
041760001 A03	1.0	1.0	1.0	1.0	*****
CALIFORNIA					
HUMBOLDT CO					
060230001 A03	1.0	1.0	1.0	1.0	*****
FLORIDA					
HARDEE CO					
120490001 A03	1.0	1.0	1.0	1.0	*****
IDAHO					
BUTTE CO					
160430001 A03	1.0	1.0	1.0	1.0	*****
INDIANA					
NEWTON CO					
182400001 A03	1.0	1.0	1.0	1.0	*****
PARKE CO					
183260001 A03	1.0	1.0	1.0	1.0	*****
MAINE					
ACADIA NAT PARK					
200210001 A03	1.0	1.0	1.0	1.0	*****
MARYLAND					
CALVERT CO					
240290001 A03	1.0	1.0	1.0	1.0	*****
MISSOURI					
SHANNON CO					
260480002 A03	1.0	1.0	1.0	1.0	*****
MONTANA					
GLACIER NAT PARK					
300570001 A03	1.0	1.0	1.0	1.0	*****
NEBRASKA					
THOMAS CO					
282480001 A03	1.0	1.0	1.0	1.0	*****
NEVADA					
WHITE PINE CO					
290840001 A03	1.0	1.0	1.0	1.0	*****
NEW HAMPSHIRE					
COOS CO					
300140001 A03	1.0	1.0	1.0	1.0	*****
NEW YORK					
JEFFERSON CO					
333430001 A03	1.0	1.0	1.0	1.0	*****
NORTH CAROLINA					
CAPE HATTERAS NAT					
360590001 A03	1.0	1.0	1.0	1.0	*****
OKLAHOMA					
CHEROKEE CO					
370440001 A03	1.0	1.0	1.0	1.0	*****
OREGON					
CURRY CO					
380460001 A03	1.0	1.0	1.0	1.0	*****
PENNSYLVANIA					
CLARION CO					
391760001 A03	1.0	1.0	1.0	1.0	*****
RHODE ISLAND					
WASHINGTON CO					
410180002 A03	1.0	1.0	1.0	1.0	*****
SOUTH CAROLINA					
RICHLAND CO					
421900001 A03	1.0	1.0	1.0	1.0	*****
SOUTH DAKOTA					
BLACK HILLS NAT FO					
430110001 A03	1.0	1.0	1.0	1.0	*****
TENNESSEE					
CUMBERLAND CO					
440680001 A03	1.0	1.0	1.0	1.0	*****
TEXAS					
MATAGORDA CO					
453930001 A03	1.0	1.0	1.0	1.0	*****
VERMONT					
ORANGE CO					
470760001 A03	1.0	1.0	1.0	1.0	*****
VIRGINIA					
SHENANDOAH NAT PAR					
462890001 A03	1.0	1.0	1.0	1.0	*****
WYTHE CO					
483660001 A03	1.0	1.0	1.0	1.0	*****
WISCONSIN					
DOOR CO					
510780001 A03	1.0	1.0	1.0	1.0	*****
WYOMING					
YELLOWSTONE NAT PA					
520860001 A03	1.0	1.0	1.0	1.0	*****

SECTION 13. URBAN AND NONURBAN METALS IN SUSPENDED PARTICULATES: TITANIUM

Table 13-1. TITANIUM, URBAN FREQUENCY DISTRIBUTIONS, 1968

($\mu g/m^3$)

LOCATION	NO. SAMP.	MIN.	FREQUENCY DISTRIBUTION, % 10	20	30	40	50	60	70	80	90	MAX.	ARITHMETIC MEAN	ARITHMETIC STD. DEV.	GEOMETRIC MEAN	GEOMETRIC STD. DEV.
ALABAMA																
GADSDEN 011480001 A01	25	0.0	NO. OF SAMPLES < 22% BELOW MIN. DET. EXCEEDS 50%									0.44				
HUNTSVILLE 011960001 A01	26	0.0	NO. OF SAMPLES < 25% BELOW MIN. DET. EXCEEDS 50%									0.07				
MOBILE 012380001 A01	25	0.0	NO. OF SAMPLES < 17% BELOW MIN. DET. EXCEEDS 50%									0.26				
MONTGOMERY 012460001 A01	26	0.0	NO. OF SAMPLES < 21% BELOW MIN. DET. EXCEEDS 50%									0.34				
ALASKA																
ANCHORAGE 02004CCC1 A01	26	0.0	0.0	0.0	0.0	0.07	0.09	0.11	0.15	0.17	0.21	0.73				
FAIRBANKS 020160001 A01	23	0.0	0.0	0.04	0.09	0.14	0.15	0.19	0.20	0.32	0.35	0.94	0.19	0.14	0.11	3.45
ARIZONA																
MARICOPA CO 030460001 A01	25	0.0	NO. OF SAMPLES < 15% BELOW MIN. DET. EXCEEDS 50%									0.73				
PHOENIX 030600002 A01	26	0.0	0.0	0.0	0.10	0.14	0.14	0.18	0.19	0.22	0.29	0.49	0.15	0.12%	0.08	4.05
TUCSON 040860001 A01	26	0.0	NO. OF SAMPLES < 21% BELOW MIN. DET. EXCEEDS 50%									0.31				
ARKANSAS																
LITTLE ROCK 041440001 A01	25	0.0	NO. OF SAMPLES < 21% BELOW MIN. DET. EXCEEDS 50%									0.11				
TEXARKANA 042560001 A01	25	0.0	NO. OF SAMPLES < 21% BELOW MIN. DET. EXCEEDS 50%									0.21				
WEST MEMPHIS 042740001 A01	26	0.0	NO. OF SAMPLES < 17% BELOW MIN. DET. EXCEEDS 50%									0.67				
CALIFORNIA																
BURBANK 05090CCC1 A01	26	0.0	0.0	0.06	0.07	0.08	0.08	0.14	0.15	0.16	0.24	0.80	0.11	0.08	0.07	3.00
GLENDALE 052940001 A01	25	0.0	NO. OF SAMPLES < 20% BELOW MIN. DET. EXCEEDS 50%									0.16				
LONG BEACH 054100001 A01	26	0.0	NO. OF SAMPLES < 16% BELOW MIN. DET. EXCEEDS 50%									0.34				
LOS ANGELES 054340001 A01	26	0.0	NO. OF SAMPLES < 19% BELOW MIN. DET. EXCEEDS 50%									0.39				
OAKLAND 055300001 A01	25	0.0	NO. OF SAMPLES < 19% BELOW MIN. DET. EXCEEDS 50%									0.41				
ONTARIO 05531CCC1 A01	24	0.0	0.0	0.0	0.0	0.04	0.09	0.16	0.18	0.22	0.29	0.40				
PASADENA 055760001 A01	25	0.0	NO. OF SAMPLES < 17% BELOW MIN. DET. EXCEEDS 50%									0.24				
RIVERSIDE 056400001 A01	26	0.0	0.0	0.0	0.0	0.09	0.11	0.15	0.16	0.18	0.25	0.34				
SACRAMENTO 056580001 A01	26	0.0	NO. OF SAMPLES < 15% BELOW MIN. DET. EXCEEDS 50%									0.40				
SAN BERNARDINO 056680001 A01	26	0.0	0.0	0.0	0.0	0.0	0.07	0.07	0.11	0.12	0.21	0.33				
SAN DIEGO 056400001 A01	26	0.0	NO. OF SAMPLES < 20% BELOW MIN. DET. EXCEEDS 50%									1.30				
SAN FRANCISCO 056860001 A01	26	0.0	NO. OF SAMPLES < 24% BELOW MIN. DET. EXCEEDS 50%									0.11				
COLORADO																
DENVER 060580001 A01	24	0.0	NO. OF SAMPLES < 17% BELOW MIN. DET. EXCEEDS 50%									0.27				
CONNECTICUT																
HARTFORD 070420001 A01	26	0.0	NO. OF SAMPLES < 19% BELOW MIN. DET. EXCEEDS 50%									0.22				
NEW HAVEN 070700001 A01	26	0.0	NO. OF SAMPLES < 22% BELOW MIN. DET. EXCEEDS 50%									0.30				
DELAWARE																
NEWARK 080140001 A01	24	0.0	NO. OF SAMPLES < 17% BELOW MIN. DET. EXCEEDS 50%									0.20				
WILMINGTON 080260001 A01	23	0.0	NO. OF SAMPLES < 17% BELOW MIN. DET. EXCEEDS 50%									0.22				

Table 13-1 (continued). TITANIUM, URBAN FREQUENCY DISTRIBUTIONS, 1968

($\mu g/m^3$)

LOCATION	NO. SAMP.	MIN.	FREQUENCY DISTRIBUTION, % 10	20	30	40	50	60	70	80	90	MAX.	ARITHMETIC MEAN	ARITHMETIC STD. DEV.	GEOMETRIC MEAN	GEOMETRIC STD. DEV.
DIST COLUMBIA																
WASHINGTON																
090020001 A01	26	0.0	NO. OF SAMPLES (10) BELOW MIN. DET. EXCEEDS 50%									0.15				
FLORIDA																
JACKSONVILLE																
101460002 A01	25	0.0	NO. OF SAMPLES (24) BELOW MIN. DET. EXCEEDS 50%									0.07				
FLORIDA																
TAMPA																
104940002 A01	23	0.0	NO. OF SAMPLES (23) BELOW MIN. DET. EXCEEDS 50%									0.44				
GEORGIA																
ATLANTA																
110200001 A01	26	0.0	0.0	0.0	0.0	0.10	0.11	0.13	0.15	0.18	0.24	0.34				
HAWAII																
HONOLULU																
120120051 A01	26	0.0	0.0	0.0	0.0	0.08	0.09	0.10	0.14	0.16	0.23	0.38				
IDAHO																
BOISE CITY																
130220001 A01	26	0.0	NO. OF SAMPLES (17) BELOW MIN. DET. EXCEEDS 50%									0.42				
ILLINOIS																
CHICAGO																
141220001 A01	25	0.0	NO. OF SAMPLES (14) BELOW MIN. DET. EXCEEDS 50%									0.21				
EAST ST LOUIS																
147120001 A01	25	0.0	NO. OF SAMPLES (19) BELOW MIN. DET. EXCEEDS 50%									0.25				
JOLIET																
149760001 A01	21	0.0	NO. OF SAMPLES (16) BELOW MIN. DET. EXCEEDS 50%									0.12				
ROCKFORD																
150660001 A01	25	0.0	NO. OF SAMPLES (16) BELOW MIN. DET. EXCEEDS 50%									0.17				
SPRINGFIELD																
152740001 A01	23	0.0	NO. OF SAMPLES (21) BELOW MIN. DET. EXCEEDS 50%									0.26				
INDIANA																
EAST CHICAGO																
191140001 A01	26	0.0	NO. OF SAMPLES (16) BELOW MIN. DET. EXCEEDS 50%									0.47				
HAMMOND																
191740001 A01	24	0.0	NO. OF SAMPLES (21) BELOW MIN. DET. EXCEEDS 50%									0.52				
INDIANAPOLES																
192040001 A01	25	0.0	0.0	0.0	0.0	0.0	0.08	0.08	0.11	0.13	0.16	0.19				
SOUTH BEND																
193440001 A01	24	0.0	NO. OF SAMPLES (18) BELOW MIN. DET. EXCEEDS 50%									0.16				
IOWA																
CEDAR RAPIDS																
160940001 A01	26	0.0	NO. OF SAMPLES (21) BELOW MIN. DET. EXCEEDS 50%									0.17				
DES MOINES																
161140001 A01	26	0.0	NO. OF SAMPLES (18) BELOW MIN. DET. EXCEEDS 50%									0.15				
DUBUQUE																
161260001 A01	23	0.0	0.0	0.0	0.0	0.0	0.08	0.08	0.09	0.12	0.14	0.16				
KANSAS																
KANSAS CITY																
171400001 A01	25	0.0	NO. OF SAMPLES (21) BELOW MIN. DET. EXCEEDS 50%									0.10				
TOPEKA																
173540001 A01	26	0.0	NO. OF SAMPLES (21) BELOW MIN. DET. EXCEEDS 50%									0.11				
WICHITA																
173740001 A01	25	0.0	NO. OF SAMPLES (23) BELOW MIN. DET. EXCEEDS 50%									0.09				
KENTUCKY																
ASHLAND																
140040002 A01	23	0.0	NO. OF SAMPLES (14) BELOW MIN. DET. EXCEEDS 50%									0.20				
COVINGTON																
140870001 A01	24	0.0	NO. OF SAMPLES (17) BELOW MIN. DET. EXCEEDS 50%									0.34				
LEXINGTON																
142300001 A01	24	0.0	NO. OF SAMPLES (15) BELOW MIN. DET. EXCEEDS 50%									0.24				
LOUISVILLE																
142390001 A01	25	0.0	NO. OF SAMPLES (16) BELOW MIN. DET. EXCEEDS 50%									0.27				
LOUISIANA																
NEW ORLEANS																
192020002 A01	25	0.0	NO. OF SAMPLES (20) BELOW MIN. DET. EXCEEDS 50%									0.30				
MAINE																
PORTLAND																
200960002 A01	21	0.0	NO. OF SAMPLES (18) BELOW MIN. DET. EXCEEDS 50%									0.20				
MARYLAND																
BALTIMORE																
210120001 A01	26	0.0	NO. OF SAMPLES (20) BELOW MIN. DET. EXCEEDS 50%									0.24				

Table 13-1 (continued). TITANIUM, URBAN FREQUENCY DISTRIBUTIONS, 1968

($\mu g/m^3$)

LOCATION	NO. SAMP.	MIN.	FREQUENCY DISTRIBUTION, %									MAX.	ARITHMETIC		GEOMETRIC	
			10	20	30	40	50	60	70	80	90		MEAN	STD. DEV.	MEAN	STD. DEV.
MASSACHUSETTS																
BOSTON																
220240001 A01	25	0.0	NO. OF SAMPLES < 19) BELOW MIN. DET. EXCEEDS 50%									0.22				
WORCHESTER																
222640001 A01	24	0.0	NO. OF SAMPLES < 17) BELOW MIN. DET. EXCEEDS 50%									0.20				
MICHIGAN																
DETROIT																
231140001 A01	26	0.0	0.0	0.07	0.08	0.11	0.13	0.14	0.17	0.21	0.25	0.53	0.14	0.11	0.08	4.23
FLINT																
231580001 A01	26	0.0	NO. OF SAMPLES < 22) BELOW MIN. DET. EXCEEDS 50%									0.24				
GRAND RAPIDS																
231920001 A01	26	0.0	NO. OF SAMPLES < 21) BELOW MIN. DET. EXCEEDS 50%									0.16				
TRENTON																
2351200[illegible] A01	25	0.0	NO. OF SAMPLES < 16) BELOW MIN. DET. EXCEEDS 50%									0.14				
MINNESOTA																
DULUTH																
241040001 A01	23	0.0	0.0	0.0	0.0	0.0	0.08	0.11	0.12	0.23	0.27	0.43				
MINNEAPOLIS																
242260001 A01	26	0.0	NO. OF SAMPLES < 17) BELOW MIN. DET. EXCEEDS 50%									0.35				
MOORHEAD																
24232C001 A01	26	0.0	NO. OF SAMPLES < 22) BELOW MIN. DET. EXCEEDS 50%									0.15				
ST PAUL																
243300001 A01	26	0.0	NO. OF SAMPLES < 16) BELOW MIN. DET. EXCEEDS 50%									0.40				
MISSISSIPPI																
JACKSON																
251260002 A01	26	0.0	NO. OF SAMPLES < 23) BELOW MIN. DET. EXCEEDS 50%									0.14				
MISSOURI																
KANSAS CITY																
26234C001 A01	24	0.0	NO. OF SAMPLES < 19) BELOW MIN. DET. EXCEEDS 50%									0.19				
MONTANA																
HELENA																
270720001 A01	24	0.0	NO. OF SAMPLES < 23) BELOW MIN. DET. EXCEEDS 50%									0.35				
NEBRASKA																
OMAHA																
281480001 A01	25	0.0	NO. OF SAMPLES < 21) BELOW MIN. DET. EXCEEDS 50%									0.26				
NEVADA																
LAS VEGAS																
290320001 A01	24	0.0	NO. OF SAMPLES < 21) BELOW MIN. DET. EXCEEDS 50%									0.08				
RENO																
290480001 S01	25	0.0	0.0	0.0	0.0	0.0	0.04	0.10	0.13	0.20	0.34	0.56				
NEW HAMPSHIRE																
CONCORD																
300120001 A01	25	0.0	NO. OF SAMPLES < 22) BELOW MIN. DET. EXCEEDS 50%									0.11				
NEW JERSEY																
BAYONNE																
31C180C01 A01	21	0.0	NO. OF SAMPLES < 16) BELOW MIN. DET. EXCEEDS 50%									0.07				
BURLINGTON CO																
310660002 A01	25	0.0	NO. OF SAMPLES < 15) BELOW MIN. DET. EXCEEDS 50%									0.16				
CAMDEN																
310720001 A01	26	0.0	NO. OF SAMPLES < 16) BELOW MIN. DET. EXCEEDS 50%									0.33				
GLASSBORO																
311700001 A01	25	0.0	NO. OF SAMPLES < 20) BELOW MIN. DET. EXCEEDS 50%									0.18				
HAMILTON																
311940001 A01	21	0.0	NO. OF SAMPLES < 18) BELOW MIN. DET. EXCEEDS 50%									0.12				
JERSEY CITY																
312520001 A01	25	0.0	NO. OF SAMPLES < 23) BELOW MIN. DET. EXCEEDS 50%									0.21				
NEWARK																
313480001 A01	24	0.0	NO. OF SAMPLES < 18) BELOW MIN. DET. EXCEEDS 50%									0.19				
PATERSON																
314140001 A01	25	0.0	NO. OF SAMPLES < 23) BELOW MIN. DET. EXCEEDS 50%									0.34				
PERTH AMBOY																
314220C01 A01	26	0.0	0.0	0.0	0.0	0.07	0.08	0.21	0.36	0.44	0.56	1.00				
TRENTON																
315400001 A01	24	0.0	NO. OF SAMPLES < 23) BELOW MIN. DET. EXCEEDS 50%									0.06				
NEW MEXICO																
ALBUQUERQUE																
32004C001 A01	24	0.0	NO. OF SAMPLES < 22) BELOW MIN. DET. EXCEEDS 50%									0.08				

Table 13-1 (continued). TITANIUM, URBAN FREQUENCY DISTRIBUTIONS, 1968

($\mu g/m^3$)

LOCATION	NO. SAMP.	MIN.	FREQUENCY DISTRIBUTION, %									MAX.	ARITHMETIC		GEOMETRIC	
			10	20	30	40	50	60	70	80	90		MEAN	STD. DEV.	MEAN	STD. DEV.
NORTH CAROLINA																
CHARLOTTE																
3702700001 A01	25	0.0	0.0	0.0	0.0	0.0	0.07	0.10	0.19	0.25	0.30	0.74				
DURHAM																
3711600C01 A01	23	0.0	0.0	0.0	0.07	0.10	0.12	0.13	0.14	0.17	0.24	0.42				
NORTH DAKOTA																
BISMARCK																
3538100701 A01	25	0.0	NO. OF SAMPLES (24) BELOW MIN. DET. EXCEEDS 50%									0.10				
OHIO																
AKRON																
3603A0001 A01	25	0.0	0.0	0.0	0.0	0.0	0.07	0.08	0.10	0.13	0.21	0.29				
CINCINNATI																
3612700G1 A01	26	0.0	NO. OF SAMPLES (23) BELOW MIN. DET. EXCEEDS 50%									0.19				
CLEVELAND																
3615000J1 A01	26	0.0	NO. OF SAMPLES (14) BELOW MIN. DET. EXCEEDS 50%									0.24				
COLUMBUS																
3614600J1 A01	24	0.0	NO. OF SAMPLES (23) BELOW MIN. DET. EXCEEDS 50%									0.07				
DAYTON																
3618AC001 A01	26	0.0	NO. OF SAMPLES (19) BELOW MIN. DET. EXCEEDS 50%									0.41				
TOLEDO																
3666A0001 S01	23	0.0	NO. OF SAMPLES (23) BELOW MIN. DET. EXCEEDS 50%									0.0				
YOUNGSTOWN																
3677AC001 A01	25	0.0	0.0	0.0	0.0	0.0	0.08	0.10	0.12	0.12	0.14	0.20				
OKLAHOMA																
OKLAHOMA CITY																
3722000J1 A01	22	0.0	NO. OF SAMPLES (23) BELOW MIN. DET. EXCEEDS 50%									0.07				
TULSA																
3730000J1 A01	24	0.0	NO. OF SAMPLES (23) BELOW MIN. DET. EXCEEDS 50%									0.10				
OREGON																
MEDFORD																
3411600J1 A01	25	0.0	0.0	0.0	0.0	0.0	0.07	0.09	0.10	0.13	0.14	0.33				
PORTLAND																
3414600J1 A01	26	0.0	NO. OF SAMPLES (14) BELOW MIN. DET. EXCEEDS 50%									0.39				
PENNSYLVANIA																
ALLENTOWN																
3701200J1 A01	26	0.0	NO. OF SAMPLES (25) BELOW MIN. DET. EXCEEDS 50%									0.15				
ALTOONA																
3701400C1 A01	23	0.0	NO. OF SAMPLES (20) BELOW MIN. DET. EXCEEDS 50%									0.17				
BETHLEHEM																
3703700J2 A01	24	0.0	NO. OF SAMPLES (18) BELOW MIN. DET. EXCEEDS 50%									0.13				
HARRISBURG																
3708800C1 A01	26	0.0	NO. OF SAMPLES (20) BELOW MIN. DET. EXCEEDS 50%									0.74				
HAZLETON																
3709600C1 A01	24	0.0	NO. OF SAMPLES (16) BELOW MIN. DET. EXCEEDS 50%									0.26				
JOHNSTOWN																
3709A0001 A01	23	0.0	0.0	0.0	0.0	0.0	0.08	0.09	0.10	0.18	0.31	0.56				
PHILADELPHIA																
3714000C1 A01	26	0.0	NO. OF SAMPLES (21) BELOW MIN. DET. EXCEEDS 50%									0.35				
PITTSBURGH																
3717A0001 A01	26	0.0	0.0	0.0	0.04	0.09	0.11	0.14	0.15	0.21	0.27	0.34				
READING																
3719200J1 A01	25	0.0	NO. OF SAMPLES (21) BELOW MIN. DET. EXCEEDS 50%									0.13				
SCRANTON																
3720400C1 A01	25	0.0	NO. OF SAMPLES (13) BELOW MIN. DET. EXCEEDS 50%									0.38				
WARMINSTER																
3721600J1 A01	25	0.0	NO. OF SAMPLES (24) BELOW MIN. DET. EXCEEDS 50%									0.14				
WEST CHESTER																
3722AF001 A01	24	0.0	NO. OF SAMPLES (21) BELOW MIN. DET. EXCEEDS 50%									0.16				
WILKES-BARRE																
3724A0001 A01	24	0.0	NO. OF SAMPLES (19) BELOW MIN. DET. EXCEEDS 50%									0.20				
YORK																
3725A0001 A01	25	0.0	NO. OF SAMPLES (16) BELOW MIN. DET. EXCEEDS 50%									0.32				
PUERTO RICO																
RAYAMON																
4003R0001 A01	25	0.0	NO. OF SAMPLES (23) BELOW MIN. DET. EXCEEDS 50%									0.06				
CATANO																
4005600C1 A01	25	0.0	NO. OF SAMPLES (24) BELOW MIN. DET. EXCEEDS 50%									0.06				

Table 13-1 (continued). TITANIUM, URBAN FREQUENCY DISTRIBUTIONS, 1968

($\mu g/m^3$)

LOCATION	NO. SAMP.	MIN.	FREQUENCY DISTRIBUTION, %									MAX.	ARITHMETIC		GEOMETRIC	
			10	20	30	40	50	60	70	80	90		MEAN	STD. DEV.	MEAN	STD. DEV.
PUERTO RICO																
GUAYANILLA																
401040001 A01	25	0.0	NO. OF SAMPLES				25% BELOW MIN. DET. EXCEEDS 50%					0.0				
PONCE																
401920001 A01	25	0.0	NO. OF SAMPLES				14% BELOW MIN. DET. EXCEEDS 50%					0.17				
RHODE ISLAND																
EAST PROVIDENCE																
410120001 A01	24	0.0	NO. OF SAMPLES				25% BELOW MIN. DET. EXCEEDS 50%					0.08				
PROVIDENCE																
410430001 A01	25	0.0	NO. OF SAMPLES				18% BELOW MIN. DET. EXCEEDS 50%					0.20				
SOUTH CAROLINA																
COLUMBIA																
420760001 A01	24	0.0	NO. OF SAMPLES				22% BELOW MIN. DET. EXCEEDS 50%					0.14				
GREENVILLE																
421180001 A01	25	0.0	NO. OF SAMPLES				20% BELOW MIN. DET. EXCEEDS 50%					0.46				
SOUTH DAKOTA																
SIOUX FALLS																
431640001 A01	22	0.0	NO. OF SAMPLES				14% BELOW MIN. DET. EXCEEDS 50%					0.22				
TENNESSEE																
CHATTANOOGA																
440340001 A01	25	0.0	NO. OF SAMPLES				24% BELOW MIN. DET. EXCEEDS 50%					0.16				
KNOXVILLE																
441740001 A01	25	0.0	NO. OF SAMPLES				23% BELOW MIN. DET. EXCEEDS 50%					0.09				
MEMPHIS																
442340001 A01	25	0.0	NO. OF SAMPLES				24% BELOW MIN. DET. EXCEEDS 50%					0.07				
NASHVILLE																
442540001 A01	25	0.0	NO. OF SAMPLES				24% BELOW MIN. DET. EXCEEDS 50%					0.08				
TEXAS																
DALLAS																
451310001 A01	26	0.0	NO. OF SAMPLES				26% BELOW MIN. DET. EXCEEDS 50%					0.0				
HOUSTON																
452540001 A01	26	0.0	NO. OF SAMPLES				25% BELOW MIN. DET. EXCEEDS 50%					0.09				
PASADENA																
452660001 A01	25	0.0	NO. OF SAMPLES				25% BELOW MIN. DET. EXCEEDS 50%					0.08				
SAN ANTONIO																
454570001 A01	25	0.0	NO. OF SAMPLES				25% BELOW MIN. DET. EXCEEDS 50%					0.0				
UTAH																
OGDEN																
460480001 A01	25	0.0	NO. OF SAMPLES				25% BELOW MIN. DET. EXCEEDS 50%					0.0				
SALT LAKE CITY																
460720001 A01	26	0.0	NO. OF SAMPLES				25% BELOW MIN. DET. EXCEEDS 50%					0.09				
VERMONT																
BURLINGTON																
470140001 A01	24	0.0	NO. OF SAMPLES				24% BELOW MIN. DET. EXCEEDS 50%					0.0				
VIRGINIA																
DANVILLE																
440920001 A01	25	0.0	NO. OF SAMPLES				20% BELOW MIN. DET. EXCEEDS 50%					0.50				
HAMPTON																
441440001 A01	25	0.0	NO. OF SAMPLES				21% BELOW MIN. DET. EXCEEDS 50%					0.11				
LYNCHBURG																
441940001 A01	24	0.0	NO. OF SAMPLES				22% BELOW MIN. DET. EXCEEDS 50%					0.19				
NORFOLK																
442140001 A01	26	0.0	0.0	0.0	0.0	0.05	0.06	0.07	0.08	0.08	0.11	0.19				
PORTSMOUTH																
442440001 A01	26	0.0	NO. OF SAMPLES				20% BELOW MIN. DET. EXCEEDS 50%					0.19				
RICHMOND																
442540001 A01	26	0.0	NO. OF SAMPLES				26% BELOW MIN. DET. EXCEEDS 50%					0.0				
ROANOKE																
442700001 A01	25	0.0	NO. OF SAMPLES				25% BELOW MIN. DET. EXCEEDS 50%					0.0				
WASHINGTON																
SEATTLE																
491440001 A01	26	0.0	NO. OF SAMPLES				22% BELOW MIN. DET. EXCEEDS 50%					0.10				
WEST VIRGINIA																
CHARLESTON																
500280001 A01	26	0.0	0.0	0.0	0.0	0.08	0.13	0.20	0.40	0.47	0.75	2.40				
WISCONSIN																
EAU CLAIRE																
510840001 A01	24	0.0	NO. OF SAMPLES				24% BELOW MIN. DET. EXCEEDS 50%					0.0				

Table 13-1 (continued). TITANIUM, URBAN FREQUENCY DISTRIBUTIONS, 1968

($\mu g/m^3$)

LOCATION	NO. SAMP.	MIN.	FREQUENCY DISTRIBUTION, %									MAX.	ARITHMETIC		GEOMETRIC	
			10	20	30	40	50	60	70	80	90		MEAN	STD. DEV.	MEAN	STD. DEV.
WISCONSIN																
KENOSHA																
511540001 A01	25	0.0	NO. OF SAMPLES (24) BELOW MIN. DET. EXCEEDS 50%									0.09				
MADISON																
511860031 A01	25	0.0	NO. OF SAMPLES (24) BELOW MIN. DET. EXCEEDS 50%									0.10				
MILWAUKEE																
512200301 A01	25	0.0	NO. OF SAMPLES (20) BELOW MIN. DET. EXCEEDS 50%									0.12				
SUPERIOR																
513480001 A01	23	0.0	NO. OF SAMPLES (20) BELOW MIN. DET. EXCEEDS 50%									0.10				
WYOMING																
CASPER																
520120001 A01	26	0.0	NO. OF SAMPLES (26) BELOW MIN. DET. EXCEEDS 50%									0.0				
CHEYENNE																
520140001 A01	26	0.0	NO. OF SAMPLES (25) BELOW MIN. DET. EXCEEDS 50%									0.06				

Table 13-2 TITANIUM, NONURBAN FREQUENCY DISTRIBUTIONS, 1968

($\mu g/m^3$)

LOCATION	NO. SAMP.	MIN.	FREQUENCY DISTRIBUTION, % 10	20	30	40	50	60	70	80	90	MAX.	ARITHMETIC MEAN	ARITHMETIC STD. DEV.	GEOMETRIC MEAN	GEOMETRIC STD. DEV.
ARIZONA																
GRAND CANYON NAT PI																
030370001 A03	25	10.0	NO. OF SAMPLES (21) BELOW MIN. DET. EXCEEDS 50%									10.040				
ARKANSAS																
MONTGOMERY CO																
041760001 A03	25	10.0	NO. OF SAMPLES (19) BELOW MIN. DET. EXCEEDS 50%									10.043				
CALIFORNIA																
HUMBOLDT CO																
053300001 A03	26	10.021	10.024	10.026	10.027	10.029	10.032	10.034	10.036	10.038	10.046	10.047	10.033	0.01	10.032	1.24
COLORADO																
MESA VERDE NAT PAR																
061530002 A03	21	10.0	NO. OF SAMPLES (21) BELOW MIN. DET. EXCEEDS 50%									10.0				
DELAWARE																
KENT CO																
040060001 A03	24	10.0	NO. OF SAMPLES (16) BELOW MIN. DET. EXCEEDS 50%									10.003				
IDAHO																
BUTTE CO																
130740001 A03	24	10.0	NO. OF SAMPLES (19) BELOW MIN. DET. EXCEEDS 50%									10.030				
INDIANA																
MONROE CO																
152800001 A03	24	10.0	NO. OF SAMPLES (23) BELOW MIN. DET. EXCEEDS 50%									10.017				
PARKE CO																
153260001 A03	25	10.0	NO. OF SAMPLES (19) BELOW MIN. DET. EXCEEDS 50%									10.078				
MAINE																
ACADIA NAT PARK																
200010001 A03	26	10.3	NO. OF SAMPLES (16) BELOW MIN. DET. EXCEEDS 50%									10.035				
MARYLAND																
CALVERT CO																
210740001 A03	23	10.0	NO. OF SAMPLES (22) BELOW MIN. DET. EXCEEDS 50%									10.025				
MISSISSIPPI																
JACKSON CO																
251240001 A03	24	10.0	NO. OF SAMPLES (21) BELOW MIN. DET. EXCEEDS 50%									10.043				
MISSOURI																
SHANNON CO																
264490001 A03	25	10.0	NO. OF SAMPLES (23) BELOW MIN. DET. EXCEEDS 50%									10.047				
MONTANA																
GLACIER NAT PARK																
270570001 A03	25	10.0	NO. OF SAMPLES (22) BELOW MIN. DET. EXCEEDS 50%									10.049				
NEBRASKA																
THOMAS CO																
292490001 A03	24	10.0	NO. OF SAMPLES (23) BELOW MIN. DET. EXCEEDS 50%									10.052				
NEVADA																
WHITE PINE CO																
290550001 A03	26	10.0	NO. OF SAMPLES (15) BELOW MIN. DET. EXCEEDS 50%									10.06[illegible]				
NEW HAMPSHIRE																
COOS CO																
300140001 A03	23	10.0	NO. OF SAMPLES (22) BELOW MIN. DET. EXCEEDS 50%									10.052				
NEW YORK																
JEFFERSON CO																
333340001 A03	26	10.0	NO. OF SAMPLES (25) BELOW MIN. DET. EXCEEDS 50%									10.033				
NORTH CAROLINA																
CAPE HATTERAS NAT																
340590001 A03	25	10.0	NO. OF SAMPLES (24) BELOW MIN. DET. EXCEEDS 50%									10.086				
OKLAHOMA																
CHEROKEE CO																
370480001 A03	25	10.0	NO. OF SAMPLES (25) BELOW MIN. DET. EXCEEDS 50%									10.0				
OREGON																
CURRY CO																
380440001 A03	26	10.0	10.0	10.0	10.0	10.0	10.018	10.027	10.029	10.030	10.035	10.074				
PENNSYLVANIA																
CLARION CO																
391760001 A03	26	10.0	NO. OF SAMPLES (25) BELOW MIN. DET. EXCEEDS 50%									10.030				
RHODE ISLAND																
WASHINGTON CO																
410380001 A03	26	10.0	NO. OF SAMPLES (19) BELOW MIN. DET. EXCEEDS 50%									10.190				
SOUTH CAROLINA																
RICHLAND CO																
421900001 A03	23	10.0	NO. OF SAMPLES (21) BELOW MIN. DET. EXCEEDS 50%									10.023				
SOUTH DAKOTA																
BLACK HILLS NAT FO																
430110001 A03	26	10.0	NO. OF SAMPLES (26) BELOW MIN. DET. EXCEEDS 50%									10.0				

Table 13-2 (continued). TITANIUM, NONURBAN FREQUENCY DISTRIBUTIONS, 1968

($\mu g/m^3$)

LOCATION	NO. SAMP.	MIN.	FREQUENCY DISTRIBUTION, %									MAX.	ARITHMETIC		GEOMETRIC	
			10	20	30	40	50	60	70	80	90		MEAN	STD. DEV.	MEAN	STD. DEV.
TEXAS																
MATAGORDA CO																
453510001 A03	25	0.0	NO. OF SAMPLES (25) BELOW MIN. DET. EXCEEDS 50%									0.0				
VERMONT																
ORANGE CO																
470350001 A03	26	0.0	NO. OF SAMPLES (19) BELOW MIN. DET. EXCEEDS 50%									0.060				
VIRGINIA																
SHENANDOAH NAT PAR																
482990001 A03	26	0.0	NO. OF SAMPLES (24) BELOW MIN. DET. EXCEEDS 50%									0.032				
WYOMING																
YELLOWSTONE NAT PAR																
520860001 A03	26	0.020	0.023	0.028	0.030	0.034	0.038	0.039	0.047	0.049	0.051	0.060	0.038	0.01	0.036	1.36

Table 13-3. TITANIUM, URBAN QUARTERLY COMPOSITES AND YEARLY AVERAGES, 1969

($\mu g/m^3$)

LOCATION	1ST QTR.	2ND QTR.	3RD QTR.	4TH QTR.	YR. AVG.
ALABAMA					
BIRMINGHAM					
01150901 A01	0.03	0.04	0.0	0.0	*****
HUNTSVILLE					
01120001 A01	0.0	0.0	0.0	0.0	*****
MOBILE					
01290001 A01	0.07	0.04	0.0	0.04	0.05
MONTGOMERY					
01240001 A01	0.0	0.03	0.0	0.03	*****
ALASKA					
ANCHORAGE					
02040001 A01	0.04	0.27	0.21	0.17	0.16
FAIRBANKS					
02030001 A01	0.0	0.18	0.28	0.03	0.12
ARIZONA					
MORENCI CO					
03040001 A01	0.0	0.0	0.0	0.0	*****
PHOENIX					
03010002 A01	0.	0.04	0.00	0.13	0.07
TUCSON					
03190001 A01	0.0	0.04	0.0	0.0	*****
ARKANSAS					
LITTLE ROCK					
04140001 A01	0.04	0.0	0.0	0.05	*****
TEXARKANA					
04050001 A01	0.0	0.0	0.0	0.0	*****
WEST MEMPHIS					
04170001 A01	0.03	0.0	0.0	0.0	*****
CALIFORNIA					
ANAHEIM					
05330001 A01	0.07	0.04	0.06	0.05	0.07
BURBANK					
05300001 A01	0.0	0.03	0.05	0.05	0.05
FRESNO					
05240001 A01	0.03	0.05	0.11	0.15	0.09
GLENDALE					
05270001 A01	0.0	0.05	0.05	0.06	0.04
LONG BEACH					
05410001 A01	0.07	0.05	0.0	0.11	0.06
LOS ANGELES					
05420101 A01	0.07	0.04	0.07	0.0	0.05
OAKLAND					
05440001 A01	0.04	0.0	0.03	0.0	*****
ORANGE					
05450 001 A 1	0.07	0.35	0.24	0.32	0.22
RIVERSIDE					
05460001 A01	0.16	0.12	0.19	0.19	0.16
SACRAMENTO					
05480001 A01	0.0	0.02	0.0	0.0	*****
SAN BERNARDINO					
05490001 A01	0.0	0.05	0.14	0.02	0.07
SAN DIEGO					
05500101 A01	0.0	0.0	0.0	0.04	*****
SAN FRANCISCO					
05510001 A01	0.0	0.0	0.0	0.0	*****
SAN JOSE					
05520001 A01	0.12	0.04	0.06	0.04	0.06
SANTA ANA					
05530001 A01	0.07	0.05	0.12	0.15	0.10
TORRANCE					
05560001 A01	0.09	0.04	0.04	0.05	0.04
COLORADO					
DENVER					
06050101 A01	0.05	0.0	0.04	0.11	0.05

LOCATION	1ST QTR.	2ND QTR.	3RD QTR.	4TH QTR.	YR. AVG.
COLORADO (CONT)					
MANITOU SPGS					
06150001 A01	0.0	0.0	0.0	0.0	*****
CONNECTICUT					
BRIDGEPORT					
07030001 A01	0.0	0.03	0.0	0.0	*****
HARTFORD					
07340101 A01	0.05	0.04	0.0	0.0	*****
NEW HAVEN					
07370001 A01	0.03	0.0	0.0	0.0	*****
WATERBURY					
07120001 A01	0.06	0.04	0.0	0.0	*****
DELAWARE					
WILMINGTON					
08220101 A01	0.04	0.0	0.08	0.04	0.05
DIST COLUMBIA					
WASHINGTON					
09030001 A01	0.0	0.0	0.0	0.0	*****
FLORIDA					
JACKSONVILLE					
10040001 A01	0.0	0.0	0.0	0.0	*****
MIAMI					
10270001 A01	0.0	0.0	0.0	0.0	*****
ST PETERSBURG					
10380001 A01	0.0	0.0	0.0	0.0	*****
TAMPA					
10430001 A01	0.0	0.0	0.0	0.0	*****
GEORGIA					
ATLANTA					
11010001 A01	0.05	0.0	0.05	0.11	0.04
COLUMBUS					
11130001 A01	0.0	0.0	0.0	0.0	*****
SAVANNAH					
11450001 A01	0.05	0.05	0.0	0.0	*****
HAWAII					
HONOLULU					
12010001 A01	0.11	0.09	0.04	0.05	0.07
IDAHO					
BOISE CITY					
13020001 A01	0.07	0.04	0.12	0.12	0.10
ILLINOIS					
CHICAGO					
14130001 A01	0.04	0.0	0.03	0.0	*****
EAST ST LOUIS					
14210001 A01	0.04	0.0	0.04	0.04	0.04
JOLIET					
14370001 A01	0.0	0.04	0.0	0.04	*****
NW CHICAGO					
14560001 A01	0.03	0.05	0.03	0.0	0.03
PEORIA					
14640001 A01	0.10	0.12	0.11	0.08	0.10
ROCKFORD					
14660001 A01	0.04	0.04	0.05	0.05	0.04
SPRINGFIELD					
14790101 A01	0.04	0.08	0.06	0.0	0.05
INDIANA					
EAST CHICAGO					
15130001 A01	0.19	0.08	0.07	0.06	0.10
EVANSVILLE					
15230001 A01	0.08	0.0	0.03	0.04	0.04
FORT WAYNE					
15270001 A01	0.0	0.0	0.0	0.0	*****
GARY					
15150001 A01	0.03	0.04	0.05	0.07	0.05

Table 13-3 (continued). TITANIUM, URBAN QUARTERLY COMPOSITES AND YEARLY AVERAGES, 1969

($\mu g/m^3$)

LOCATION	1ST QTR.	2ND QTR.	3RD QTR.	4TH QTR.	YR. AVG.
INDIANA					
HAMMOND					
181740001 A01	0.04	0.05	0.04	0.04	0.04
INDIANAPOLIS					
182040301 A01	0.0	0.04	0.02	0.03	0.03
NEW ALBANY					
182340001 A01	0.04	0.0	0.04	0.03	0.03
SOUTH BEND					
183440301 A01	0.0	0.03	0.0	0.04	*****
TERRE HAUTE					
184040001 A01	0.04	0.04	0.04	0.05	0.04
IOWA					
DAVENPORT					
191360001 A01	0.10	0.14	0.07	0.04	0.09
DES MOINES					
191540001 A01	0.04	0.04	0.0	0.04	0.03
DUBUQUE					
191760001 A01	0.02	0.0	0.0	0.0	*****
KANSAS					
KANSAS CITY					
207160001 A01	0.0	0.0	0.0	0.01	*****
TOPEKA					
207560001 A01	0.0	0.0	0.0	0.0	*****
WICHITA					
207740001 A01	0.0	0.0	0.0	0.0	*****
KENTUCKY					
ASHLAND					
210340301 A01	0.02	0.07	0.10	0.09	0.07
COVINGTON					
210460301 A01	0.05	0.05	0.04	0.04	0.04
LOUISVILLE					
211240301 A01	0.05	0.04	0.04	0.03	0.04
LOUISIANA					
BATON ROUGE					
220240301 A01	0.0	0.0	0.0	0.0	*****
NEW ORLEANS					
220720302 A01	0.0	0.0	0.0	0.0	*****
SHREVEPORT					
220740001 A01	0.0	0.0	0.0	0.0	*****
MARYLAND					
BALTIMORE					
240120001 A01	0.06	0.05	0.04	0.04	0.05
MASSACHUSETTS					
BOSTON					
250340301 A01	0.0	0.04	0.04	0.0	*****
FALL RIVER					
250540001 A01	0.02	0.0	0.0	0.0	*****
SPRINGFIELD					
251140301 A01	0.04	0.04	0.04	0.0	0.04
WORCHESTER					
251340001 A01	0.05	0.04	0.04	0.10	0.04
MICHIGAN					
DETROIT					
261140001 A01	0.05	0.04	0.07	0.04	0.05
FLINT					
261440001 A01	0.03	0.07	0.10	0.07	0.07
GRAND RAPIDS					
261540301 A01	0.03	0.04	0.03	0.0	0.03
LANSING					
261940001 A01	0.0	0.04	0.0	0.01	*****
SAGINAW					
262340001 A01	0.0	0.0	0.0	0.0	*****

LOCATION	1ST QTR.	2ND QTR.	3RD QTR.	4TH QTR.	YR. AVG.
MICHIGAN (CONT'D)					
MIDLAND					
262520301 A01	0.05	0.04	0.0	0.01	0.03
MINNESOTA					
DULUTH					
263740001 A01	0.06	0.12	0.13	0.0	0.07
MINNEAPOLIS					
263740301 A01	0.04	0.04	0.0	0.0	*****
ST PAUL					
263940301 A01	0.04	0.03	0.0	0.0	*****
MISSOURI					
KANSAS CITY					
267160301 A01	0.0	0.0	0.0	0.04	*****
ST LOUIS					
267960301 A01	0.12	0.13	0.19	0.08	0.14
MONTANA					
BILLINGS					
270230301 A01	0.0	0.0	0.04	0.0	*****
NEBRASKA					
OMAHA					
281560301 A01	0.0	0.0	0.0	0.0	*****
NEVADA					
LAS VEGAS					
296020301 A01	0.0	0.0	0.0	0.04	*****
RENO					
296420301 A01	0.13	0.10	0.04	0.03	0.08
NEW HAMPSHIRE					
MANCHESTER					
300120301 A01	0.0	0.0	0.0	0.0	*****
NEW JERSEY					
CAMDEN					
301660301 A01	0.0	0.0	0.0	0.0	*****
ELIZABETH					
301900301 A01	0.07	0.03	0.04	0.0	0.03
JERSEY CITY					
301960301 A01	0.0	0.0	0.0	0.0	*****
NEWARK					
302040301 A01	0.07	0.04	0.05	0.07	0.06
PATERSON					
302460301 A01	0.05	0.03	0.03	0.03	0.03
PERTH AMBOY					
302520301 A01	0.04	0.0	0.05	0.05	0.04
TRENTON					
302660001 A01	0.11	0.12	0.13	0.13	0.14
NEW MEXICO					
ALBUQUERQUE					
320340301 A01	0.0	0.05	0.01	0.0	*****
NEW YORK					
ALBANY					
330060301 A01	0.0	0.0	0.0	0.0	*****
BUFFALO					
330140301 A01	0.05	0.04	0.03	0.03	0.04
NEW YORK CITY					
330460301 A01	0.03	0.04	0.03	0.04	0.04
NIAGARA FALLS					
330740301 A01	0.04	0.04	0.04	0.04	0.04
ROCHESTER					
330760301 A01	0.04	0.0	0.04	0.04	0.04
SYRACUSE					
330840001 A01	0.02	0.0	0.0	0.0	*****

Table 13-3 (continued). TITANIUM, URBAN QUARTERLY COMPOSITES AND YEARLY AVERAGES, 1969

($\mu g/m^3$)

LOCATION	1ST QTR.	2ND QTR.	3RD QTR.	4TH QTR.	YR. AVG.
NEW YORK					
UTICA					
330880001 A01	0.0	0.0	0.0	0.0	*****
NORTH CAROLINA					
CHARLOTTE					
340700001 A01	0.19	0.09	0.09	0.11	0.12
DURHAM					
341160001 A01	0.04	0.09	0.04	0.07	0.05
GREENSBORO					
341740001 A01	0.15	0.09	0.07	0.14	0.11
WINSTON-SALEM					
344490001 A01	0.13	0.05	0.11	0.17	0.13
NORTH DAKOTA					
BISMARCK					
350100001 A01	0.0	0.0	0.0	0.0	*****
OHIO					
AKRON					
360060001 A01	0.04	0.09	0.05	0.04	0.05
CANTON					
361230001 A01	0.06	0.05	0.05	0.04	0.05
CINCINNATI					
361700001 A01	0.0	0.00	0.03	0.03	0.03
CLEVELAND					
361900001 A01	0.07	0.14	0.11	0.07	0.09
COLUMBUS					
362140001 A01	0.03	0.04	0.0	0.04	0.03
DAYTON					
362460001 A01	0.0	0.0	0.0	0.0	*****
TOLEDO					
364670001 A01	0.0	0.0	0.0	0.0	*****
YOUNGSTOWN					
367760001 A01	0.13	0.06	0.05	0.07	0.07
OKLAHOMA					
OKLAHOMA CITY					
372170001 A01	0.0	0.0	0.0	0.0	*****
TULSA					
372810001 A01	0.0	0.0	0.0	0.0	*****
OREGON					
MEDFORD					
381150001 A01	0.04	0.08	0.10	0.11	0.08
PORTLAND					
381440001 A01	0.10	0.04	0.04	0.11	0.08
PENNSYLVANIA					
ALLENTOWN					
390120001 A01	0.0	0.0	0.0	0.0	*****
ARTHURDALE					
390360002 A01	0.0	0.04	0.04	0.0	*****
ERIE					
390960001 A01	0.0	0.0	0.0	0.0	*****
HARRISBURG					
391440001 A01	0.0	0.0	0.0	0.0	*****
HAZLETON					
391960001 A01	0.0	0.0	0.0	0.0	*****
JOHNSTOWN					
392440001 A01	0.0	0.0	0.0	0.0	*****
PHILADELPHIA					
393140001 A01	0.03	0.05	0.08	0.02	0.05
PITTSBURGH					
393760001 A01	0.14	0.14	0.14	0.08	0.13
READING					
393820001 A01	0.07	0.1	0.04	0.03	0.06
SCRANTON					
394040001 A01	0.05	0.04	0.03	0.0	0.03
WARMINSTER					
394160001 A01	0.0	0.03	0.03	0.0	*****

LOCATION	1ST QTR.	2ND QTR.	3RD QTR.	4TH QTR.	YR. AVG.
394380001 (CUMTZ)					
WEST CHESTER					
394380001 A01	0.07	0.05	0.04	0.04	0.06
WILKES-BARRE					
394430001 A01	0.07	0.0	0.0	0.0	*****
YORK					
394560001 A01	0.0	0.03	0.0	0.04	*****
PUERTO RICO					
BAYAMON					
400390001 A01	0.04	0.06	0.0	0.12	0.06
CATANO					
400660001 A01	0.04	0.04	0.0	0.04	0.04
GUAYANILLA					
401180001 A01	0.0	0.0	0.0	0.0	*****
PONCE					
401930001 A01	0.0	0.0	0.03	0.05	*****
SAN JUAN					
402140001 A01	0.04	0.0	0.01	0.04	0.02
RHODE ISLAND					
EAST PROVIDENCE					
410130001 A01	0.0	0.0	0.0	0.0	*****
PROVIDENCE					
410330001 A01	0.04	0.04	0.04	0.0	0.03
SOUTH CAROLINA					
COLUMBIA					
42 [illegible] A01	0.0	0.0	0.0	0.0	*****
GREENVILLE					
421140001 A01	0.0	0.04	0.0	0.0	*****
TENNESSEE					
CHATTANOOGA					
440780001 A01	0.0	0.0	0.0	0.0	*****
KNOXVILLE					
441740001 A01	0.04	0.03	0.0	0.0	*****
MEMPHIS					
442360001 A01	0.0	0.0	0.0	0.01	*****
NASHVILLE					
442540001 A01	0.03	0.0	0.0	0.0	*****
TEXAS					
DALLAS					
451310001 A01	0.1	0.0	0.0	0.0	*****
EL PASO					
451700001 A01	0.09	0.09	0.0	0.0	*****
FORT WORTH					
451880001 A01	0.0	0.0	0.0	0.0	*****
HOUSTON					
452360001 A01	0.0	0.0	0.0	0.0	*****
PASADENA					
452760001 A01	0.0	0.0	0.0	0.0	*****
SAN ANTONIO					
453630001 A01	0.0	0.0	0.0	0.0	*****
UTAH					
OGDEN					
4606+0001 A01	0.04	0.04	0.04	0.0	0.03
SALT LAKE CITY					
460990001 A01	0.0	0.0	0.0	0.04	*****
VERMONT					
BURLINGTON					
470140001 A01	0.0	0.0	0.0	0.0	*****
VIRGINIA					
NEWPORT					
480920001 A01	0.04	0.03	0.05	0.04	0.05
NORFOLK					
481440001 A01	0.05	0.1	0.04	0.04	0.03

Table 13-3 (continued). TITANIUM, URBAN QUARTERLY COMPOSITES AND YEARLY AVERAGES, 1969

($\mu g/m^3$)

LOCATION	1ST QTR.	2ND QTR.	3RD QTR.	4TH QTR.	YR. AVG.
VIRGINIA					
LYNCHBURG					
511940001 A01	0.08	0.04	0.04	0.04	0.05
NEWPORT NEWS					
517120001 A01	0.01	0.01	0.0	0.0	*****
NORFOLK					
517140001 A01	0.04	0.04	0.04	0.04	0.04
PORTSMOUTH					
517440001 A01	0.04	0.0	0.03	0.04	0.04
RICHMOND					
517630001 A01	0.04	0.05	0.0	0.04	0.04
ROANOKE					
517700001 A01	0.0	0.0	0.0	0.0	*****
WASHINGTON					
SEATTLE					
531080001 A01	0.04	0.03	0.04	0.04	0.04
SPOKANE					
532740001 A01	0.04	0.08	0.04	0.06	0.11
TACOMA					
532910001 A01	0.0	0.01	0.0	0.04	*****

LOCATION	1ST QTR.	2ND QTR.	3RD QTR.	4TH QTR.	YR. AVG.
WEST VIRGINIA					
CHARLESTON					
530740001 A01	0.17	0.38	0.22	0.11	0.27
WISCONSIN					
EAU CLAIRE					
510940001 A01	0.04	0.0	0.03	0.0	*****
KENOSHA					
511540001 A01	0.0	0.05	0.04	0.04	0.03
MADISON					
511860001 A01	0.0	0.0	0.0	0.0	*****
MILWAUKEE					
513200001 A01	0.0	0.07	0.07	0.0	*****
RACINE					
513840001 A01	0.0	0.0	0.0	0.0	*****
WYOMING					
CASPER					
560120001 A01	0.0	0.0	0.0	0.0	*****
CHEYENNE					
560140001 A01	0.0	0.0	0.0	0.0	*****

Table 13-4. TITANIUM, NONURBAN QUARTERLY COMPOSITES AND YEARLY AVERAGES, 1969

($\mu g/m^3$)

LOCATION	1ST QTR.	2ND QTR.	3RD QTR.	4TH QTR.	YR. AVG.
ARIZONA					
GRAND CANYON NAT PA					
040370001 A03	10.0	10.0	10.0	10.0	*****
ARKANSAS					
MONTGOMERY CO					
051760001 A03	10.0	10.0	10.0	10.0	*****
CALIFORNIA					
KINGS CO					
054430001 A03	10.0	10.0	10.0	10.0	*****
FLORIDA					
HARDEE CO					
120460001 A03	10.0	10.0	10.0	10.0	*****
ILLINOIS					
ALEXA CO					
170430001 A03	10.0	10.0	10.0	10.0	*****
INDIANA					
WAYNE CO					
183900001 A03	10.0	10.0	10.0	10.0	*****
PARKE CO					
183260001 A03	10.0	10.0	10.0	10.0	*****
MAINE					
ACADIA NAT PARK					
230310001 A03	10.0	10.0	10.0	10.0	*****
MARYLAND					
CALVERT CO					
240090001 A03	10.0	10.0	10.0	10.0	*****
MISSOURI					
SHANNON CO					
266490002 A03	10.0	10.0	10.0	10.0	*****
MONTANA					
GLACIER NAT PARK					
270470001 A03	10.0	10.0	10.0	10.0	*****
NEBRASKA					
THOMAS CO					
317640001 A03	10.0	10.0	10.0	10.0	*****
NEVADA					
WHITE PINE CO					
290670001 A03	10.0	10.0	10.0	10.0	*****
NEW HAMPSHIRE					
COOS CO					
330140001 A03	10.0	10.0	10.0	10.0	*****
NEW YORK					
JEFFERSON CO					
331360001 A03	10.0	10.0	10.0	10.0	*****

LOCATION	1ST QTR.	2ND QTR.	3RD QTR.	4TH QTR.	YR. AVG.
NORTH CAROLINA					
CAPE HATTERAS NAT					
340590001 A03	10.0	10.0	10.0	10.0	*****
OKLAHOMA					
CHEROKEE CO					
370640001 A03	10.0	10.0	10.0	10.0	*****
OREGON					
CURRY CO					
390460001 A03	10.0	10.0	10.0	10.0	*****
PENNSYLVANIA					
CLARION CO					
391760001 A03	10.0	10.0	10.0	10.0	*****
RHODE ISLAND					
WASHINGTON CO					
410360002 A03	10.0	10.0	10.0	10.0	*****
SOUTH CAROLINA					
RICHLAND CO					
421900001 A03	10.0	10.0	10.0	10.0	*****
SOUTH DAKOTA					
BLACK HILLS NAT FO					
430110001 A03	10.0	10.0	10.0	10.0	*****
TENNESSEE					
CUMBERLAND CO					
440680001 A03	10.0	10.0	10.0	10.0	*****
TEXAS					
BRAZORIA CO					
450510001 A03	10.0	10.0	10.0	10.0	*****
VERMONT					
ORANGE CO					
470340001 A03	10.0	10.0	10.0	10.330	*****
VIRGINIA					
SHENANDOAH NAT PAR					
482990001 A03	10.0	10.0	10.0	10.0	*****
WYTHE CO					
489640001 A03	10.0	10.0	10.0	10.0	*****
WISCONSIN					
DOOR CO					
510780001 A03	10.0	10.0	10.0	10.0	*****
WYOMING					
YELLOWSTONE NAT PA					
520860001 A04	10.0	10.0	10.0	10.0	*****

SECTION 14. URBAN AND NONURBAN METALS IN SUSPENDED PARTICULATES: VANADIUM

Table 14-1. VANADIUM, URBAN FREQUENCY DISTRIBUTIONS, 1968

($\mu g/m^3$)

LOCATION	NO. SAMP.	MIN.	FREQUENCY DISTRIBUTION, %										MAX.	ARITHMETIC MEAN	ARITHMETIC STD. DEV.	GEOMETRIC MEAN	GEOMETRIC STD. DEV.
			10	20	30	40	50	60	70	80	90	95					
ALABAMA																	
GADSDEN																	
011040001 A01	25	0.0	NO. OF SAMPLES (26) BELOW MIN. DET. EXCEEDS 50%										0.019				
HUNTSVILLE																	
011960001 A01	26	0.0	NO. OF SAMPLES (26) BELOW MIN. DET. EXCEEDS 50%										0.0				
MOBILE																	
012190001 A01	25	0.0	NO. OF SAMPLES (26) BELOW MIN. DET. EXCEEDS 50%										0.019				
MONTGOMERY																	
012960001 A01	26	0.0	NO. OF SAMPLES (26) BELOW MIN. DET. EXCEEDS 50%										0.0				
ALASKA																	
ANCHORAGE																	
020340001 A01	26	0.0	NO. OF SAMPLES (26) BELOW MIN. DET. EXCEEDS 50%										0.0				
FAIRBANKS																	
020600001 A01	23	0.0	NO. OF SAMPLES (23) BELOW MIN. DET. EXCEEDS 50%										0.007				
ARIZONA																	
MARICOPA CO.																	
040940001 A01	26	0.0	NO. OF SAMPLES (26) BELOW MIN. DET. EXCEEDS 50%										0.0				
PHOENIX																	
040980002 A01	26	0.0	NO. OF SAMPLES (26) BELOW MIN. DET. EXCEEDS 50%										0.0				
TUCSON																	
040960001 A01	26	0.0	NO. OF SAMPLES (26) BELOW MIN. DET. EXCEEDS 50%										0.0				
ARKANSAS																	
LITTLE ROCK																	
050460001 A01	25	0.0	NO. OF SAMPLES (26) BELOW MIN. DET. EXCEEDS 50%										0.0				
PRESCOTT																	
050980001 A01	25	0.0	NO. OF SAMPLES (26) BELOW MIN. DET. EXCEEDS 50%										0.0				
WEST MEMPHIS																	
050760001 A01	26	0.0	NO. OF SAMPLES (26) BELOW MIN. DET. EXCEEDS 50%										0.012				
CALIFORNIA																	
ALAMEDA																	
060400001 A01	24	0.0	NO. OF SAMPLES (26) BELOW MIN. DET. EXCEEDS 50%										0.062				
GLENDALE																	
060940001 A01	25	0.0	NO. OF SAMPLES (26) BELOW MIN. DET. EXCEEDS 50%										0.095				
LONG BEACH																	
060130001 A01	26	0.0	NO. OF SAMPLES (26) BELOW MIN. DET. EXCEEDS 50%										0.064				
LOS ANGELES																	
060190001 A01	26	0.0	NO. OF SAMPLES (26) BELOW MIN. DET. EXCEEDS 50%										0.233				
OAKLAND																	
060020001 A01	25	0.0	0.0	0.0	0.0	0.0	0.027	0.12	0.015	0.026	0.029	0.064					
ONTARIO																	
060360001 A01	24	0.0	NO. OF SAMPLES (26) BELOW MIN. DET. EXCEEDS 50%										0.025				
PASADENA																	
060190001 A01	25	0.0	NO. OF SAMPLES (26) BELOW MIN. DET. EXCEEDS 50%										0.024				
RIVERSIDE																	
060660001 A01	26	0.0	NO. OF SAMPLES (26) BELOW MIN. DET. EXCEEDS 50%										0.027				
SACRAMENTO																	
060670301 A01	26	0.0	NO. OF SAMPLES (26) BELOW MIN. DET. EXCEEDS 50%										0.0				
SAN BERNARDINO																	
060710001 A01	26	0.0	NO. OF SAMPLES (26) BELOW MIN. DET. EXCEEDS 50%										0.014				
SAN DIEGO																	
060730001 A01	26	0.0	NO. OF SAMPLES (26) BELOW MIN. DET. EXCEEDS 50%										0.035				
SAN FRANCISCO																	
060750001 A01	26	0.0	NO. OF SAMPLES (26) BELOW MIN. DET. EXCEEDS 50%										0.150				
COLORADO																	
DENVER																	
080540001 A01	24	0.0	NO. OF SAMPLES (26) BELOW MIN. DET. EXCEEDS 50%										0.0				
CONNECTICUT																	
HARTFORD																	
070420001 A01	26	0.0	0.033	0.077	0.091	0.100	0.110	0.230	0.380	0.400	0.480	1.700	0.249	0.35	0.138	0.97	
NEW HAVEN																	
070700001 A01	26	0.033	0.077	0.120	0.130	0.150	0.280	0.350	0.530	0.620	1.700	2.500	0.534	0.68	0.285	3.10	
DELAWARE																	
NEWARK																	
080140001 A01	24	0.0	0.0	0.0	0.0	0.0	0.019	0.018	0.021	0.049	0.054	0.290					
WILMINGTON																	
080240001 A01	23	0.019	0.032	0.044	0.060	0.084	0.097	0.120	0.190	0.420	0.490	1.100	0.237	0.30	0.123	3.19	

Table 14-1 (continued). VANADIUM, URBAN FREQUENCY DISTRIBUTIONS, 1968

($\mu g/m^3$)

LOCATION	NO. SAMP.	MIN.	FREQUENCY DISTRIBUTION, P									MAX.	ARITHMETIC		GEOMETRIC	
			10	20	30	40	50	60	70	80	90		MEAN	STD. DEV.	MEAN	STD. DEV.
DIST COLUMBIA																
WASHINGTON																
090020001 A01	26	0.009	0.015	0.031	0.043	0.055	0.061	0.095	0.110	0.130	0.190	0.280	0.088	0.071	0.062	2.50
FLORIDA																
JACKSONVILLE																
101960002 A01	25	0.0	0.0	0.0	0.015	0.022	0.026	0.029	0.045	0.080	0.091	0.160	0.035	0.041	0.017	4.93
FLORIDA																
TAMPA																
104160002 A01	23	0.0	0.0	0.007	0.010	0.015	0.018	0.021	0.033	0.044	0.069	0.121	0.026	0.031	0.015	3.56
GEORGIA																
ATLANTA																
113220001 A01	26	0.0	NO. OF SAMPLES (26) BELOW MIN. DET. EXCEEDS 50%									0.0				
HAWAII																
HONOLULU																
120120001 A01	26	0.0	0.0	0.0	0.0	0.004	0.010	0.012	0.030	0.032	0.079	0.470				
IDAHO																
BOISE CITY																
130220001 A01	26	0.0	NO. OF SAMPLES (26) BELOW MIN. DET. EXCEEDS 50%									0.0				
ILLINOIS																
CHICAGO																
141220001 A01	25	0.0	0.0	0.0	0.0	0.0	0.018	0.026	0.036	0.066	0.110	0.150				
EAST ST LOUIS																
147120001 A01	25	0.0	NO. OF SAMPLES (25) BELOW MIN. DET. EXCEEDS 50%									0.0				
JOLIET																
149760001 A01	21	0.0	NO. OF SAMPLES (19) BELOW MIN. DET. EXCEEDS 50%									0.015				
ROCKFORD																
160680001 A01	25	0.0	NO. OF SAMPLES (20) BELOW MIN. DET. EXCEEDS 50%									0.014				
SPRINGFIELD																
167040001 A01	23	0.0	NO. OF SAMPLES (23) BELOW MIN. DET. EXCEEDS 50%									0.0				
INDIANA																
EAST CHICAGO																
151190001 A01	26	0.0	0.0	0.0	0.007	0.014	0.023	0.032	0.045	0.052	0.082	0.540				
HAMMOND																
151740001 A01	26	0.0	NO. OF SAMPLES (16) BELOW MIN. DET. EXCEEDS 50%									0.094				
INDIANAPOLIS																
152040001 A01	25	0.0	NO. OF SAMPLES (23) BELOW MIN. DET. EXCEEDS 50%									0.250				
SOUTH BEND																
153840001 A01	24	0.0	NO. OF SAMPLES (16) BELOW MIN. DET. EXCEEDS 50%									0.074				
IOWA																
CEDAR RAPIDS																
160440001 A01	26	0.0	NO. OF SAMPLES (26) BELOW MIN. DET. EXCEEDS 50%									0.0				
DES MOINES																
161140001 A01	26	0.0	NO. OF SAMPLES (26) BELOW MIN. DET. EXCEEDS 50%									0.0				
DUBUQUE																
161260001 A01	23	0.0	NO. OF SAMPLES (23) BELOW MIN. DET. EXCEEDS 50%									0.0				
KANSAS																
KANSAS CITY																
171840001 A01	25	0.0	NO. OF SAMPLES (25) BELOW MIN. DET. EXCEEDS 50%									0.0				
TOPEKA																
173540001 A01	26	0.0	NO. OF SAMPLES (26) BELOW MIN. DET. EXCEEDS 50%									0.0				
WICHITA																
173740001 A01	25	0.0	NO. OF SAMPLES (25) BELOW MIN. DET. EXCEEDS 50%									0.0				
KENTUCKY																
ASHLAND																
140040002 A01	23	0.0	NO. OF SAMPLES (23) BELOW MIN. DET. EXCEEDS 50%									0.0				
COVINGTON																
180820001 A01	25	0.0	NO. OF SAMPLES (24) BELOW MIN. DET. EXCEEDS 50%									0.008				
LEXINGTON																
182300001 A01	24	0.0	NO. OF SAMPLES (24) BELOW MIN. DET. EXCEEDS 50%									0.0				
LOUISVILLE																
182380001 A01	25	0.0	NO. OF SAMPLES (23) BELOW MIN. DET. EXCEEDS 50%									0.020				
LOUISIANA																
NEW ORLEANS																
192020002 A01	25	0.0	NO. OF SAMPLES (17) BELOW MIN. DET. EXCEEDS 50%									0.040				
MAINE																
PORTLAND																
200660002 A01	21	0.024	0.031	0.073	0.099	0.200	0.310	0.750	0.920	1.600	7.300	*****	1.890	3.321	0.403	6.64
MARYLAND																
BALTIMORE																
210120001 A01	26	0.011	0.018	0.042	0.046	0.060	0.072	0.140	0.220	0.300	0.540	0.720	0.185	0.20	0.102	3.20

Table 14-1 (continued). VANADIUM, URBAN FREQUENCY DISTRIBUTIONS, 1968

($\mu g/m^3$)

LOCATION	NO. SAMP.	FREQUENCY DISTRIBUTION, %											ARITHMETIC		GEOMETRIC	
		MIN.	10	20	30	40	50	60	70	80	90	MAX.	MEAN	STD. DEV.	MEAN	STD. DEV.
MASSACHUSETTS																
BOSTON																
220240001 A01	25	0.150	0.190	0.280	0.340	0.360	0.470	0.620	0.760	0.960	1.360	1.600	0.617	0.40	0.502	1.97
WORCHESTER																
272640001 A01	24	0.017	0.021	0.033	0.054	0.070	0.072	0.150	0.250	0.430	0.570	0.650	0.194	0.23	0.109	3.16
MICHIGAN																
DETROIT																
261180001 A01	25	0.0	0.0	0.0	0.0	0.0	0.0	0.007	0.009	0.011	0.016	0.029				
FLINT																
2615R0001 A01	25	0.0	NO. OF SAMPLES (25) BELOW MIN. DET. EXCEEDS 50%									0.0				
GRAND RAPIDS																
261920001 A01	26	0.0	NO. OF SAMPLES (26) BELOW MIN. DET. EXCEEDS 50%									0.0				
TRENTON																
265120001 A01	25	0.0	NO. OF SAMPLES (25) BELOW MIN. DET. EXCEEDS 50%									0.009				
MINNESOTA																
DULUTH																
241040001 A01	23	0.0	NO. OF SAMPLES (23) BELOW MIN. DET. EXCEEDS 50%									0.0				
MINNEAPOLIS																
242260001 A01	26	0.0	NO. OF SAMPLES (23) BELOW MIN. DET. EXCEEDS 50%									0.021				
MOORHEAD																
242320001 A01	24	0.0	NO. OF SAMPLES (24) BELOW MIN. DET. EXCEEDS 50%									0.0				
ST PAUL																
243300001 A01	26	0.0	NO. OF SAMPLES (18) BELOW MIN. DET. EXCEEDS 50%									0.062				
MISSISSIPPI																
JACKSON																
251240002 A01	26	0.0	NO. OF SAMPLES (26) BELOW MIN. DET. EXCEEDS 50%									0.0				
MISSOURI																
KANSAS CITY																
262390001 A01	24	0.0	NO. OF SAMPLES (22) BELOW MIN. DET. EXCEEDS 50%									0.040				
MONTANA																
HELENA																
27720001 A01	24	0.0	NO. OF SAMPLES (24) BELOW MIN. DET. EXCEEDS 50%									0.0				
NEBRASKA																
OMAHA																
281480001 A01	25	0.0	NO. OF SAMPLES (25) BELOW MIN. DET. EXCEEDS 50%									0.0				
NEVADA																
LAS VEGAS																
29037C001 A01	24	0.0	NO. OF SAMPLES (24) BELOW MIN. DET. EXCEEDS 50%									0.0				
RENO																
29C48C001 A01	25	0.0	0.0	0.0	0.0	0.004	0.013	0.017	0.025	0.031	0.046	0.097				
NEW HAMPSHIRE																
CONCORD																
30012C001 A01	25	0.0	0.007	0.011	0.020	0.022	0.033	0.034	0.051	0.057	0.110	0.350	0.054	0.08	0.029	3.15
NEW JERSEY																
BAYONNE																
310140001 A01	21	0.065	0.080	0.081	0.371	0.110	0.160	0.190	0.280	0.420	0.850	0.930	0.286	0.31	0.170	2.81
BURLINGTON CO																
31066C002 A01	25	0.0	0.0	0.0	0.011	0.012	0.027	0.031	0.034	0.042	0.060	0.230	0.035	0.05	0.016	4.27
CAMDEN																
310720001 A01	26	0.037	0.056	0.100	0.120	0.153	0.160	0.190	0.230	0.280	0.420	0.770	0.215	0.18	0.165	2.12
GLASSBORO																
311700001 A01	25	0.0	0.006	0.010	0.013	0.016	0.024	0.028	0.037	0.060	0.079	0.120	0.034	0.03	0.022	2.75
HAMILTON																
311940001 A01	21	0.007	0.011	0.019	0.025	0.030	0.047	0.058	0.070	0.150	0.180	0.380	0.079	0.09	0.045	2.24
JERSEY CITY																
312320001 A01	25	0.011	0.031	0.039	0.064	0.072	0.110	0.140	0.240	0.410	1.400	2.300	0.355	0.59	0.134	4.07
NEWARK																
313480001 A01	24	0.0	0.0	0.025	0.043	0.035	0.130	0.240	0.320	0.500	0.680	1.400	0.246	0.33	0.088	7.40
PATERSON																
314140001 A01	25	0.0	0.0	0.0	0.028	0.037	0.060	0.069	0.210	0.300	0.500	1.400	0.210	0.37	0.042	3.35
PERTH AMBOY																
314220001 A01	25	0.0	0.016	0.032	0.036	0.052	0.054	0.073	0.110	0.140	0.370	0.450	0.105	0.12	0.059	3.33
TRENTON																
315400001 A01	24	0.0	0.010	0.013	0.033	0.035	0.044	0.068	0.069	0.080	0.110	0.310	0.062	0.07	0.036	3.59
NEW MEXICO																
ALBUQUERQUE																
320040001 A01	24	0.0	NO. OF SAMPLES (24) BELOW MIN. DET. EXCEEDS 50%									0.0				

Table 14-1 (continued). VANADIUM, URBAN FREQUENCY DISTRIBUTIONS, 1968

($\mu g/m^3$)

LOCATION	NO. SAMP.	MIN.	FREQUENCY DISTRIBUTION, % 10	20	30	40	50	60	70	80	90	MAX.	ARITHMETIC MEAN	ARITHMETIC STD. DEV.	GEOMETRIC MEAN	GEOMETRIC STD. DEV.
NORTH CAROLINA																
CHARLOTTE																
371730001 A01	25	0.0	NO. OF SAMPLES E	13% BELOW MIN. DET. EXCEEDS 50%								0.064				
DURHAM																
371160001 A01	25	0.0	NO. OF SAMPLES E	17% BELOW MIN. DET. EXCEEDS 50%								0.020				
NORTH DAKOTA																
BISMARCK																
380130001 A01	25	0.0	NO. OF SAMPLES E	25% BELOW MIN. DET. EXCEEDS 50%								0.0				
OHIO																
AKRON																
360160001 A01	25	0.0	NO. OF SAMPLES E	28% BELOW MIN. DET. EXCEEDS 50%								0.009				
CINCINNATI																
361270001 A01	25	0.0	NO. OF SAMPLES E	25% BELOW MIN. DET. EXCEEDS 50%								0.3				
CLEVELAND																
361350001 A01	26	0.0	NO. OF SAMPLES E	26% BELOW MIN. DET. EXCEEDS 50%								0.0				
COLUMBUS																
361460001 A01	24	0.0	NO. OF SAMPLES E	29% BELOW MIN. DET. EXCEEDS 50%								0.0				
DAYTON																
361660001 A01	24	0.0	NO. OF SAMPLES E	24% BELOW MIN. DET. EXCEEDS 50%								0.014				
TOLEDO																
366060001 A01	24	0.0	NO. OF SAMPLES E	21% BELOW MIN. DET. EXCEEDS 50%								0.010				
YOUNGSTOWN																
367740001	25	0.0	NO. OF SAMPLES E	29% BELOW MIN. DET. EXCEEDS 50%								0.0				
TENNESSEE																
CHATTANOOGA																
471530001 A01	22	0.0	NO. OF SAMPLES E	23% BELOW MIN. DET. EXCEEDS 50%								0.0				
TEXAS																
481090001 A01	24	0.0	NO. OF SAMPLES E	24% BELOW MIN. DET. EXCEEDS 50%								0.0				
OREGON																
MEDFORD																
411430001 A01	25	0.0	NO. OF SAMPLES E	24% BELOW MIN. DET. EXCEEDS 50%								0.019				
PORTLAND																
384440001 A01	24	0.0	0.007	0.011	0.014	0.017	0.018	0.025	0.032	0.059	0.087	0.309	0.061	0.064	0.022	3.71
PENNSYLVANIA																
ALLENTOWN																
390120001 A01	26	0.015	0.020	0.026	0.037	0.041	0.055	0.070	0.130	0.120	0.243	0.473	0.099	0.101	0.060	2.40
ALTOONA																
390140001 A01	23	0.0	NO. OF SAMPLES E	22% BELOW MIN. DET. EXCEEDS 50%								0.032				
BETHLEHEM																
390780002 A01	24	0.0	0.004	0.008	0.013	0.023	0.033	0.044	0.066	0.092	0.140	0.322	0.061	0.08	0.028	4.16
HARRISBURG																
393480001 A01	26	0.0	0.0	0.0	0.0	0.009	0.011	0.044	0.110	0.120	0.350	0.941				
HAZLETON																
393960001 A01	24	0.0	NO. OF SAMPLES E	23% BELOW MIN. DET. EXCEEDS 50%								0.210				
JOHNSTOWN																
394460001 A01	23	0.0	NO. OF SAMPLES E	15% BELOW MIN. DET. EXCEEDS 50%								0.376				
PHILADELPHIA																
397160001 A01	25	0.016	0.059	0.120	0.130	0.140	0.160	0.280	0.350	0.440	1.000	11.600	0.353	0.40	0.221	2.74
PITTSBURGH																
397260001 A01	26	0.0	NO. OF SAMPLES E	20% BELOW MIN. DET. EXCEEDS 50%								0.014				
READING																
397420001 A01	25	0.013	0.028	0.036	0.055	0.064	0.086	0.097	0.100	0.110	0.190	0.360	0.097	0.07	0.075	2.13
SCRANTON																
398040001 A01	25	0.0	0.011	0.015	0.025	0.027	0.038	0.044	0.077	0.110	0.170	0.320	0.073	0.09	0.039	3.33
WARMINSTER																
399160001 A01	25	0.0	0.0	0.0	0.0	0.007	0.011	0.019	0.021	0.026	0.130	0.270				
WEST CHESTER																
399280001 A01	24	0.0	0.0	0.0	0.0	0.007	0.009	0.011	0.016	0.051	0.093	0.130				
WILKES-BARRE																
399430001 A01	24	0.0	0.0	0.009	0.031	0.038	0.043	0.057	0.072	0.089	0.120	0.150	0.054	0.04	0.029	4.49
YORK																
399560001 A01	25	0.0	0.0	0.0	0.0	0.015	0.016	0.024	0.041	0.071	0.330	0.660				
PUERTO RICO																
HAYAMO																
400480001 A01	25	0.0	0.0	0.007	0.023	0.031	0.043	0.072	0.085	0.150	0.190	0.340	0.079	0.08	0.034	5.31
CATANO																
400560001 A01	25	0.014	0.017	0.026	0.039	0.054	0.075	0.076	0.130	0.130	0.160	0.190	0.080	0.06	0.061	2.27

Table 14-1 (continued). VANADIUM, URBAN FREQUENCY DISTRIBUTIONS, 1968

($\mu g/m^3$)

LOCATION	NO. SAMP.	MIN.	FREQUENCY DISTRIBUTION, %									MAX.	ARITHMETIC MEAN	ARITHMETIC STD. DEV.	GEOMETRIC MEAN	GEOMETRIC STD. DEV.
			10	20	30	40	50	60	70	80	90					
PUERTO RICO																
GUAYANILLA																
401340001 A01	25	10.0	10.0	10.0	10.0	10.008	10.026	10.030	10.046	10.094	10.130	10.240				
PONCE																
401370001 A01	25	10.0	10.0	10.0	10.008	10.008	10.011	10.012	10.014	10.014	10.023	10.083				
RHODE ISLAND																
EAST PROVIDENCE																
410170001 A01	25	10.0	10.042	10.050	10.056	10.076	10.085	10.110	10.140	10.220	10.260	10.560	10.127	0.12	10.096	3.06
PROVIDENCE																
410300071 A01	25	10.015	10.049	10.073	10.130	10.150	10.200	10.290	10.490	10.580	11.700	11.600	10.389	0.42	10.225	3.02
SOUTH CAROLINA																
COLUMBIA																
420760001 A01	24	10.0	NO. OF SAMPLES (16) BELOW MIN. DET. EXCEEDS 50%									10.044				
GREENVILLE																
421190001 A01	25	10.0	NO. OF SAMPLES (15) BELOW MIN. DET. EXCEEDS 50%									10.063				
SOUTH DAKOTA																
SIOUX FALLS																
431490001 A01	22	10.0	NO. OF SAMPLES (21) BELOW MIN. DET. EXCEEDS 50%									10.027				
TENNESSEE																
CHATTANOOGA																
440490001 A01	25	10.0	NO. OF SAMPLES (21) BELOW MIN. DET. EXCEEDS 50%									10.031				
KNOXVILLE																
441740001 A01	26	10.0	NO. OF SAMPLES (25) BELOW MIN. DET. EXCEEDS 50%									10.012				
MEMPHIS																
442340001 A01	25	10.0	NO. OF SAMPLES (24) BELOW MIN. DET. EXCEEDS 50%									10.009				
NASHVILLE																
442540001 A01	25	10.0	NO. OF SAMPLES (24) BELOW MIN. DET. EXCEEDS 50%									10.006				
TEXAS																
DALLAS																
451310002 A01	26	10.0	NO. OF SAMPLES (26) BELOW MIN. DET. EXCEEDS 50%									10.0				
HOUSTON																
452560001 A01	26	10.0	NO. OF SAMPLES (26) BELOW MIN. DET. EXCEEDS 50%									10.0				
PASADENA																
452060001 A01	26	10.0	NO. OF SAMPLES (24) BELOW MIN. DET. EXCEEDS 50%									10.014				
SAN ANTONIO																
454570001 A01	26	10.0	NO. OF SAMPLES (25) BELOW MIN. DET. EXCEEDS 50%									10.0				
UTAH																
OGDEN																
460840001 A01	25	10.0	NO. OF SAMPLES (25) BELOW MIN. DET. EXCEEDS 50%									10.0				
SALT LAKE CITY																
460520001 A01	26	10.0	NO. OF SAMPLES (26) BELOW MIN. DET. EXCEEDS 50%									10.0				
VERMONT																
BURLINGTON																
470140001 A01	24	10.0	10.010	10.012	10.017	10.031	10.052	10.079	10.095	10.130	10.170	10.180	10.068	0.06	10.040	3.47
VIRGINIA																
DANVILLE																
480920001 A01	25	10.0	NO. OF SAMPLES (22) BELOW MIN. DET. EXCEEDS 50%									10.013				
HAMPTON																
481460001 A01	26	10.0	10.007	10.008	10.013	10.015	10.021	10.031	10.037	10.041	10.067	10.180	10.031	0.03	10.020	2.73
LYNCHBURG																
481640001 A01	25	10.0	NO. OF SAMPLES (23) BELOW MIN. DET. EXCEEDS 50%									10.029				
NORFOLK																
482140001 A01	26	10.0	10.017	10.030	10.031	10.036	10.047	10.063	10.073	10.100	10.120	10.140	10.057	0.04	10.043	2.55
PORTSMOUTH																
482440001 A01	26	10.0	10.0	10.009	10.012	10.020	10.024	10.034	10.039	10.044	10.095	10.120	10.036	0.03	10.018	4.20
RICHMOND																
482600001 A01	26	10.0	10.0	10.008	10.008	10.014	10.027	10.030	10.065	10.087	10.160	10.230	10.051	0.06	10.020	5.07
ROANOKE																
482730001 A01	25	10.0	NO. OF SAMPLES (17) BELOW MIN. DET. EXCEEDS 50%									10.057				
WASHINGTON																
SEATTLE																
491440001 A01	26	10.0	10.0	10.0	10.0	10.006	10.008	10.012	10.026	10.030	10.058	10.097				
WEST VIRGINIA																
CHARLESTON																
5002P0001 A01	26	10.0	NO. OF SAMPLES (14) BELOW MIN. DET. EXCEEDS 50%									10.130				
WISCONSIN																
EAU CLAIRE																
510940301 A01	24	10.0	NO. OF SAMPLES (23) BELOW MIN. DET. EXCEEDS 50%									10.009				

Table 14-1 (continued). VANADIUM, URBAN FREQUENCY DISTRIBUTIONS, 1968

($\mu g/m^3$)

LOCATION	NO. SAMP.	MIN.	FREQUENCY DISTRIBUTION, %									MAX.	ARITHMETIC		GEOMETRIC	
			10	20	30	40	50	60	70	80	90		MEAN	STD. DEV.	MEAN	STD. DEV.
WISCONSIN																
KENOSHA																
511540001 A01	25	0.0	NO. OF SAMPLES EXCEEDS 50% BELOW MIN. DET.									0.077				
MADISON																
511960001 A01	25	0.0	NO. OF SAMPLES EXCEEDS 50% BELOW MIN. DET.									0.0				
MILWAUKEE																
512200001 A01	25	0.0	NO. OF SAMPLES EXCEEDS 50% BELOW MIN. DET.									0.072				
SUPERIOR																
513480001 A01	23	0.0	NO. OF SAMPLES EXCEEDS 50% BELOW MIN. DET.									0.011				
WYOMING																
CASPER																
520120001 A01	26	0.0	NO. OF SAMPLES EXCEEDS 50% BELOW MIN. DET.									0.0				
CHEYENNE																
520140001 A01	26	0.0	NO. OF SAMPLES EXCEEDS 50% BELOW MIN. DET.									0.0				

Table 14-2. VANADIUM, NONURBAN FREQUENCY DISTRIBUTIONS, 1968

($\mu g/m^3$)

LOCATION	% SAMP.	MIN.	FREQUENCY DISTRIBUTION, %									MAX.	ARITHMETIC MEAN	ARITHMETIC STD. DEV.	GEOMETRIC MEAN	GEOMETRIC STD. DEV.
			10	20	30	40	50	60	70	80	90					
ARIZONA																
GRAND CANYON NAT PK																
040370001 A03	25	10.0	NO. OF SAMPLES < 25% BELOW MIN. DET. EXCEEDS 50%									0.0				
ARKANSAS																
MONTGOMERY CO																
051760001 A03	25	10.0	NO. OF SAMPLES < 25% BELOW MIN. DET. EXCEEDS 50%									0.0				
CALIFORNIA																
HUMBOLDT CO																
063310001 A03	26	10.0	NO. OF SAMPLES < 26% BELOW MIN. DET. EXCEEDS 50%									0.0				
COLORADO																
MESA VERDE NAT PARK																
060930001 A03	21	10.0	NO. OF SAMPLES < 21% BELOW MIN. DET. EXCEEDS 50%									0.0				
DELAWARE																
KENT CO																
080360001 A03	34	97.1	10.0	0.028	0.026	0.026	0.031	0.037	0.048	0.076	0.096	0.130	0.039	0.038	0.030	0.22
IDAHO																
BLAINE CO																
130140001 A03	24	12.0	NO. OF SAMPLES < 25% BELOW MIN. DET. EXCEEDS 50%									0.003				
INDIANA																
WARREN CO																
197860001 A03	24	12.0	NO. OF SAMPLES < 24% BELOW MIN. DET. EXCEEDS 50%									0.0				
PARKE CO																
199240001 A03	25	4.0	NO. OF SAMPLES < 24% BELOW MIN. DET. EXCEEDS 50%									0.003				
MAINE																
ACADIA NAT PARK																
200010001 A03	26	10.0	10.0	10.0	10.0	10.002	10.003	10.004	10.004	10.005	10.011	10.024				
MARYLAND																
CALVERT CO																
210240001 A03	24	12.0	10.003	10.004	10.007	10.013	10.018	10.019	10.029	10.034	10.045	10.056	10.019	0.02	10.012	3.19
MISSISSIPPI																
JACKSON CO																
251740001 A03	24	12.0	NO. OF SAMPLES < 24% BELOW MIN. DET. EXCEEDS 50%									0.004				
MISSOURI																
SHANNON CO																
290440001 A03	25	12.0	NO. OF SAMPLES < 24% BELOW MIN. DET. EXCEEDS 50%									0.003				
MONTANA																
GLACIER NAT PARK																
300570001 A03	26	10.0	NO. OF SAMPLES < 25% BELOW MIN. DET. EXCEEDS 50%									0.0				
NEBRASKA																
THOMAS CO																
310440001 A03	24	12.0	NO. OF SAMPLES < 24% BELOW MIN. DET. EXCEEDS 50%									0.0				
NEVADA																
WHITE PINE CO																
320560001 A03	26	10.0	NO. OF SAMPLES < 26% BELOW MIN. DET. EXCEEDS 50%									0.0				
NEW HAMPSHIRE																
COOS CO																
330140001 A03	23	10.0	NO. OF SAMPLES < 12% BELOW MIN. DET. EXCEEDS 50%									0.030				
NEW YORK																
JEFFERSON CO																
333960001 A03	26	10.0	10.0	10.0	10.0	10.002	10.002	10.003	10.005	10.005	10.007	10.043				
NORTH CAROLINA																
CAPE HATTERAS NAT																
340930001 A03	26	10.0	10.0	10.0	10.0	10.0	10.002	10.002	10.004	10.005	10.015	10.031				
OKLAHOMA																
CHEROKEE CO																
370480001 A03	25	12.0	NO. OF SAMPLES < 25% BELOW MIN. DET. EXCEEDS 50%									0.0				
OREGON																
CURRY CO																
380460001 A03	26	12.0	NO. OF SAMPLES < 26% BELOW MIN. DET. EXCEEDS 50%									0.0				
PENNSYLVANIA																
CLARION CO																
391760001 A03	26	10.0	NO. OF SAMPLES < 26% BELOW MIN. DET. EXCEEDS 50%									0.006				
RHODE ISLAND																
WASHINGTON CO																
410390001 A03	26	10.003	10.005	10.011	10.014	10.018	10.020	10.026	10.037	10.050	10.072	10.150	10.034	0.04	10.021	2.69
SOUTH CAROLINA																
RICHLAND CO																
421900001 A03	23	10.0	NO. OF SAMPLES < 13% BELOW MIN. DET. EXCEEDS 50%									0.023				
SOUTH DAKOTA																
BLACK HILLS NAT FO																
430110001 A03	26	10.0	NO. OF SAMPLES < 26% BELOW MIN. DET. EXCEEDS 50%									0.0				

Table 14-2 (continued). VANADIUM, NONURBAN FREQUENCY DISTRIBUTIONS, 1968

($\mu g/m^3$)

LOCATION	NO. SAMP.	MIN.	FREQUENCY DISTRIBUTION, %									MAX.	ARITHMETIC		GEOMETRIC	
			10	20	30	40	50	60	70	80	90		MEAN	STD. DEV.	MEAN	STD. DEV.
TEXAS																
MATAGORDA CT 483390031 A03	25	0.0	NO. OF SAMPLES (25) BELOW MIN. DET. EXCEEDS 50%									0.0				
VERMONT																
ORANGE CT 473360301 A03	76	0.0	0.003	0.004	0.007	0.010	0.017	0.022	0.037	0.074	0.130	0.180	0.041	0.05	0.016	4.91
VIRGINIA																
SHENANDOAH NAT PAR 482490001 A03	24	0.0	NO. OF SAMPLES (22) BELOW MIN. DET. EXCEEDS 50%									0.004				
WYOMING																
YELLOWSTONE NAT PAR 562460001 A03	24	0.0	NO. OF SAMPLES (24) BELOW MIN. DET. EXCEEDS 50%									0.0				

Table 14-3. VANADIUM, URBAN QUARTERLY COMPOSITES AND YEARLY AVERAGES, 1969

($\mu g/m^3$)

LOCATION	1ST QTR.	2ND QTR.	3RD QTR.	4TH QTR.	YR. AVG.
ALABAMA					
JEFFERSON					
011460001 A01	0.009	0.011	0.009	0.008	0.009
HUNTSVILLE					
011460001 A01	0.010	0.007	0.007	0.009	0.009
MOBILE					
012160001 A01	0.019	0.023	0.020	0.024	0.024
MONTGOMERY					
012460001 A01	0.013	0.011	0.0	0.014	0.013
ALASKA					
ANCHORAGE					
020260001 A01	0.0	0.019	0.015	0.014	0.013
FAIRBANKS					
020160001 A01	0.010	0.020	0.015	0.012	0.015
ARIZONA					
MARICOPA CO.					
030440001 A01	0.0	0.0	0.0	0.004	*****
PHOENIX					
030400001 A01	0.0	0.018	0.003	0.011	0.009
TUCSON					
030600001 A01	0.011	0.010	0.010	0.0	0.008
ARKANSAS					
LITTLE ROCK					
041460001 A01	0.0	0.009	0.008	0.011	0.008
PINE BLUFF					
041660001 A01	0.0	0.009	0.009	0.004	0.007
WEST MEMPHIS					
041760001 A01	0.011	0.010	0.0	0.007	0.007
CALIFORNIA					
ALAMEDA					
060130001 A01	0.013	0.013	0.017	0.018	0.015
BAKERSFIELD					
060290001 A01	0.031	0.014	0.011	0.014	0.017
FRESNO					
060190001 A01	0.008	0.009	0.015	0.017	0.012
GLENDALE					
060340001 A01	0.023	0.018	0.016	0.014	0.018
LONG BEACH					
060370001 A01	0.040	0.022	0.023	0.024	0.027
LOS ANGELES					
060370002 A01	0.034	0.0	0.013	0.013	0.015
OAKLAND					
060010001 A01	0.023	0.033	0.035	0.035	0.030
ONTARIO					
060710001 A01	0.024	0.016	0.023	0.017	0.020
RIVERSIDE					
060650001 A01	0.022	0.021	0.021	0.014	0.019
SACRAMENTO					
060670001 A01	0.0	0.010	0.021	0.0	*****
SAN BERNARDINO					
060710001 A01	0.016	0.011	0.017	0.013	0.014
SAN DIEGO					
060730001 A01	0.041	0.016	0.024	0.044	0.031
SAN FRANCISCO					
060750001 A01	0.019	0.018	0.016	0.042	0.024
SAN JOSE					
060850001 A01	0.011	0.010	0.011	0.010	0.010
SANTA ANA					
060710001 A01	0.015	0.014	0.025	0.026	0.020
VENTURA					
060830001 A01	0.013	0.0	0.016	0.029	0.016
COLORADO					
DENVER					
080310001 A01	0.009	0.009	0.010	0.017	0.011

LOCATION	1ST QTR.	2ND QTR.	3RD QTR.	4TH QTR.	YR. AVG.
COLORADO (CONT'D)					
MANITOU SPGS.					
081400001 A01	0.0	0.0	0.0	0.0	*****
CONNECTICUT					
BRIDGEPORT					
090010001 A01	0.190	0.210	0.140	0.410	0.237
HARTFORD					
090310001 A01	0.440	0.280	0.160	0.340	0.305
NEW HAVEN					
090090001 A01	0.700	0.580	0.160	0.200	0.407
WATERBURY					
090950001 A01	0.380	0.420	0.140	0.460	0.355
DELAWARE					
WILMINGTON					
100030001 A01	0.170	0.160	0.270	0.490	0.272
DIST. COLUMBIA					
WASHINGTON					
110010001 A01	0.270	0.120	0.049	0.190	0.140
FLORIDA					
JACKSONVILLE					
120160001 A01	0.032	0.100	0.088	0.046	0.067
MIAMI					
120860001 A01	0.064	0.064	0.079	0.045	0.063
ST PETERSBURG					
120530001 A01	0.053	0.024	0.037	0.021	0.034
TAMPA					
120570001 A01	0.064	0.045	0.064	0.032	0.047
GEORGIA					
ATLANTA					
130210001 A01	0.048	0.013	0.013	0.019	0.023
CHATHAM					
130510001 A01	0.011	0.0	0.010	0.009	0.009
SAVANNAH					
130510001 A01	0.110	0.037	0.027	0.060	0.058
HAWAII					
HONOLULU					
150030001 A01	0.035	0.034	0.023	0.034	0.032
IDAHO					
BOISE CITY					
160010001 A01	0.0	0.0	0.041	0.009	*****
ILLINOIS					
CHICAGO					
170310001 A01	0.210	0.047	0.018	0.110	0.096
EAST ST LOUIS					
170130001 A01	0.016	0.012	0.017	0.014	0.015
JOLIET					
170370001 A01	0.041	0.024	0.014	0.021	0.022
NORTH CHICAGO					
170430001 A01	0.037	0.030	0.017	0.008	0.019
PEORIA					
170140001 A01	0.017	0.021	0.021	0.016	0.019
ROCKFORD					
170450001 A01	0.027	0.013	0.007	0.017	0.016
SPRINGFIELD					
170790001 A01	0.011	0.011	0.019	0.015	0.014
INDIANA					
EAST CHICAGO					
151270001 A01	0.230	0.030	0.059	0.140	0.115
EVANSVILLE					
151300001 A01	0.011	0.012	0.010	0.012	0.011
FORT WAYNE					
151360001 A01	0.023	0.017	0.009	0.017	0.016
GARY					
151520001 A01	0.047	0.014	0.018	0.035	0.028

Table 14-3 (continued). VANADIUM, URBAN QUARTERLY COMPOSITES AND YEARLY AVERAGES, 1969

($\mu g/m^3$)

LOCATION	1ST QTR.	2ND QTR.	3RD QTR.	4TH QTR.	YR. AVG.
INDIANA					
HAMMOND [illegible]	0.077	0.0[illegible]	0.01[illegible]	0.049	0.048
INDIANAPOLIS [illegible]	0.028	0.01[illegible]	0.020	0.0[illegible]	0.022
NEW ALBANY [illegible]	0.029	0.015	0.010	0.0[illegible]	0.0[illegible]
SOUTH BEND [illegible]	0.037	0.1[illegible]	0.021	0.0[illegible]	0.047
TERRE HAUTE [illegible]	0.01[illegible]	0.01[illegible]	0.006	0.0	0.009
IOWA					
DAVENPORT [illegible]	0.017	0.008	0.007	0.01[illegible]	0.012
DES MOINES [illegible]	0.014	0.018	0.012	0.0[illegible]	0.01[illegible]
DUBUQUE [illegible]	0.029	0.010	0.006	0.016	0.0[illegible]
KANSAS					
KANSAS CITY [illegible]	0.016	0.016	0.0[illegible]	0.014	0.014
TOPEKA [illegible]	0.009	0.0	0.007	0.00[illegible]	0.00[illegible]
WICHITA [illegible]	0.00[illegible]	0.00[illegible]	0.010	0.011	0.00[illegible]
KENTUCKY					
ASHLAND [illegible]	0.014	0.0[illegible]	0.012	0.017	0.013
COVINGTON [illegible]	0.014	0.01[illegible]	0.0[illegible]	0.009	0.011
LOUISVILLE [illegible]	0.028	0.015	0.015	0.011	0.017
LOUISIANA					
BATON ROUGE [illegible]	0.0	0.008	0.0	0.006	*****
NEW ORLEANS [illegible]	0.014	0.020	0.020	0.036	0.022
SHREVEPORT [illegible]	0.[illegible]	0.0[illegible]	0.00[illegible]	0.0[illegible]	0.0[illegible]
MARYLAND					
BALTIMORE [illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
MASSACHUSETTS					
BOSTON [illegible]	[illegible]	[illegible]	0.2[illegible]	0.[illegible]	0.[illegible]
FALL RIVER 220580002 A01	0.5[illegible]	0.170	0.1[illegible]	0.[illegible]	0.[illegible]
SPRINGFIELD 222140001 A01	0.[illegible]	0.0[illegible]	0.0[illegible]	0.[illegible]	0.1[illegible]
WORCHESTER 222460001 A01	0.[illegible]	0.1[illegible]	0.1[illegible]	0.[illegible]	0.[illegible]
MICHIGAN					
DEARBORN 231140001 A01	0.1[illegible]	0.[illegible]	0.	0.[illegible]	0.[illegible]
DETROIT 231180001 A01	0.[illegible]	0.0[illegible]	0.0[illegible]	0.0[illegible]	0.0[illegible]
FLINT 231580001 A01	0.0[illegible]	0.0[illegible]	0.0[illegible]2	0.0[illegible]	0.0[illegible]
GRAND RAPIDS 231820001 A01	0.0[illegible]	0.0[illegible]	0.009	0.0[illegible]	0.0[illegible]
LANSING 232840001 A01	0.00[illegible]	0.0	0.0	0.0	*****
SAGINAW 234760001 A01	0.0	0.0	0.00[illegible]	0.0	*****
MICHIGAN (CONT'D)					
TRENTON [illegible]	0.015	0.017	0.009	0.013	0.014
MINNESOTA					
DULUTH [illegible]	0.009	0.015	0.011	0.009	0.011
MINNEAPOLIS [illegible]	0.025	0.015	0.007	0.022	0.017
ST. PAUL [illegible]	0.061	0.011	0.009	0.018	0.025
MISSOURI					
KANSAS CITY [illegible]	0.023	0.0	0.008	0.013	0.011
ST. LOUIS [illegible]	0.027	0.01[illegible]	0.01[illegible]	0.035	0.023
MONTANA					
HELENA [illegible]	0.0	0.0	0.0	0.0	*****
NEBRASKA					
OMAHA [illegible]	0.011	0.0	0.007	0.010	0.007
NEVADA					
LAS VEGAS [illegible]	0.007	0.0	0.01[illegible]	0.011	0.00[illegible]
RENO [illegible]	0.070	0.0[illegible]	0.049	0.080	0.040
NEW HAMPSHIRE					
CONCORD [illegible]	0.0[illegible]	0.1[illegible]	0.06[illegible]	0.1[illegible]	0.0[illegible]
NEW JERSEY					
BURLINGTON CO [illegible]	0.120	0.06[illegible]	0.04[illegible]	0.0[illegible]	0.08[illegible]
ELIZABETH [illegible]	0.190	0.09[illegible]	0.120	0.120	0.131
GLASSBORO [illegible]	0.1[illegible]	0.070	0.1[illegible]	0.0[illegible]	0.0[illegible]
HAMILTON [illegible]	0.0[illegible]	0.056	0.078	0.1[illegible]	0.0[illegible]
JERSEY CITY [illegible]	0.[illegible]	0.1[illegible]	0.140	0.170	0.20[illegible]
NEWARK [illegible]	0.[illegible]	0.07[illegible]	0.1[illegible]	0.1[illegible]	0.1[illegible]
PATERSON [illegible]	0.220	0.08[illegible]	0.1[illegible]	0.[illegible]	0.156
PERTH AMBOY [illegible]	0.200	0.0[illegible]	0.0[illegible]	0.120	0.1[illegible]
TRENTON [illegible]	0.150	0.190	0.140	0.100	0.145
NEW MEXICO					
ALBUQUERQUE 320060001 A01	0.008	0.00[illegible]	0.008	0.01[illegible]	0.0[illegible]
NEW YORK					
ALBANY [illegible]	0.240	0.0[illegible]	0.120	0.170	0.1[illegible]
BUFFALO [illegible]	0.046	0.020	0.020	0.037	0.031
NEW YORK CITY [illegible]	1.700	0.[illegible]	0.180	0.4[illegible]	0.[illegible]
NIAGARA FALLS [illegible]	0.038	0.02[illegible]	0.027	0.019	0.0[illegible]
ROCHESTER 335740001 A01	0.0[illegible]	0.0[illegible]	0.020	0.0[illegible]	0.0[illegible]
SYRACUSE 336620001 A01	0.0[illegible]	0.0[illegible]	0.0[illegible]	0.0[illegible]	0.0[illegible]

Table 14-3 (continued). VANADIUM, URBAN QUARTERLY COMPOSITES AND YEARLY AVERAGES, 1969

($\mu g/m^3$)

LOCATION	1ST QTR.	2ND QTR.	3RD QTR.	4TH QTR.	YR. AVG.
NEW YORK					
ALBANY					
336660001 A01	0.170	0.073	0.047	0.110	0.099
NORTH CAROLINA					
CHARLOTTE					
340720001 A01	0.074	0.051	0.019	0.043	0.047
DURHAM					
341160001 A01	0.027	0.019	0.019	0.011	0.019
GREENSBORO					
341740001 A01	0.038	0.014	0.016	0.034	0.026
WINSTON-SALEM					
344450002 A01	0.259	0.054	0.010	0.336	0.174
NORTH DAKOTA					
BISMARCK					
350150001 A01	0.9	0.0	0.012	0.0	0.231
OHIO					
AKRON					
360060001 A01	0.014	0.011	0.009	0.011	0.011
CANTON					
361000001 A01	0.009	0.0	0.013	0.009	0.007
CINCINNATI					
361730001 A01	0.030	0.019	0.012	0.015	0.019
CLEVELAND					
361930001 A01	0.014	0.021	0.017	0.011	0.015
COLUMBUS					
361490001 A01	0.009	0.012	0.011	0.009	0.010
DAYTON					
361650001 A01	0.014	0.012	0.008	0.014	0.012
TOLEDO					
365090001 A01	0.010	0.004	0.0	0.008	0.007
YOUNGSTOWN					
367260001 A01	0.011	0.0	0.010	0.012	0.009
OKLAHOMA					
OKLAHOMA CITY					
372230001 A01	0.0	0.0	0.000	0.010	0.002
TULSA					
373100001 A01	0.004	0.0	0.0	0.007	0.002
OREGON					
MEDFORD					
381160001 A01	0.010	0.0	0.0	0.024	0.008
PORTLAND					
381460001 A01	0.054	0.054	0.035	0.087	0.054
PENNSYLVANIA					
ALLENTOWN					
390130001 A01	0.150	0.036	0.047	0.160	0.149
BETHLEHEM					
390780002 A01	0.120	0.100	0.065	0.110	0.099
ERIE					
391860002 A01	0.014	0.009	0.010	0.004	0.010
HARRISBURG					
392980003 A01	0.150	0.160	0.087	0.120	0.129
HAZLETON					
393360001 A01	0.037	0.014	0.007	0.023	0.020
JOHNSTOWN					
394461001 A01	0.0	0.009	0.010	0.0	0.000
PHILADELPHIA					
397140001 A01	0.550	0.310	0.420	0.440	0.435
PITTSBURGH					
397260001 A01	0.011	0.021	0.016	0.014	0.015
READING					
397470001 A01	0.170	0.130	0.038	0.170	0.142
SCRANTON					
398040001 A01	0.045	0.081	0.050	0.073	0.074
WARMINSTER					
398160001 A01	0.061	0.060	0.030	0.079	0.060

LOCATION	1ST QTR.	2ND QTR.	3RD QTR.	4TH QTR.	YR. AVG.
WASHINGTON (DC/MD)					
WEST CHESTER					
399280001 A01	0.054	0.049	0.074	0.057	0.056
WILKES-BARRE					
399630001 A01	0.034	0.041	0.071	0.039	0.033
YORK					
399960001 A01	0.190	0.099	0.081	0.180	0.137
PUERTO RICO					
RIO PIEDRAS					
400380001 A01	0.100	0.035	0.029	0.170	0.071
CATANO					
400560002 A01	0.170	0.340	0.200	0.140	0.212
GUAYANILLA					
401040001 A01	0.100	0.130	0.054	0.150	0.108
PONCE					
401920001 A01	0.014	0.011	0.021	0.041	0.022
SAN JUAN					
402140001 A01	0.024	0.010	0.015	0.056	0.026
RHODE ISLAND					
EAST PROVIDENCE					
410120001 A01	0.250	0.200	0.100	0.190	0.185
PROVIDENCE					
413300001 A01	0.100	0.220	0.120	0.980	0.407
SOUTH CAROLINA					
COLUMBIA					
420760001 A01	0.031	0.010	0.008	0.010	0.012
GREENVILLE					
421180001 A01	0.037	0.024	0.014	0.035	0.026
TENNESSEE					
CHATTANOOGA					
440780001 A01	0.020	0.009	0.013	0.012	0.014
KNOXVILLE					
441760001 A01	0.015	0.010	0.009	0.013	0.011
MEMPHIS					
442760001 A01	0.006	0.009	0.007	0.007	0.007
NASHVILLE					
442540001 A01	0.007	0.0	0.0	0.006	0.000
TEXAS					
DALLAS					
451310002 A01	0.009	0.0	0.007	0.009	0.006
EL PASO					
451700001 A01	0.004	0.0	0.0	0.012	0.000
FORT WORTH					
451880001 A01	0.012	0.0	0.0	0.0	0.000
HOUSTON					
452560001 A01	0.011	0.0	0.011	0.0	0.000
PASADENA					
454060001 A01	0.0	0.0	0.0	0.0	0.000
SAN ANTONIO					
454570001 A01	0.0	0.0	0.0	0.0	0.000
UTAH					
OGDEN					
460980001 A01	0.0	0.0	0.009	0.0	0.002
SALT LAKE CITY					
460920001 A01	0.0	0.0	0.0	0.0	0.000
VERMONT					
BURLINGTON					
470140001 A01	0.077	0.190	0.047	0.099	0.113
VIRGINIA					
DANVILLE					
480920001 A01	0.015	0.0	0.013	0.018	0.012
HAMPTON					
481440001 A01	0.039	0.038	0.050	0.053	0.045

Table 14-3. (continued). VANADIUM, URBAN QUARTERLY COMPOSITES AND YEARLY AVERAGES, 1969

($\mu g/m^3$)

LOCATION	1ST QTR.	2ND QTR.	3RD QTR.	4TH QTR.	YR. AVG.
VIRGINIA					
LYNCHBURG					
491940001 A01	0.041	0.010	0.009	0.029	0.020
NEWPORT NEWS					
492120001 A01	0.067	0.060	0.033	0.060	0.055
NORFOLK					
492140001 A01	0.140	0.120	0.088	0.140	0.122
PORTSMOUTH					
492440001 A01	0.133	0.079	0.113	0.147	0.104
RICHMOND					
492560001 A01	0.140	0.084	0.072	0.120	0.105
ROANOKE					
492700001 A01	0.042	0.021	0.015	0.035	0.028
WASHINGTON					
SEATTLE					
531543301 A01	0.048	0.029	0.017	0.057	0.038
SPOKANE					
532430001 A01	0.020	0.008	0.013	0.022	0.016
TACOMA					
532140001 A01	0.052	0.033	0.020	0.051	0.039

LOCATION	1ST QTR.	2ND QTR.	3RD QTR.	4TH QTR.	YR. AVG.
WEST VIRGINIA					
CHARLESTON					
540280001 A01	0.033	0.049	0.026	0.019	0.033
WISCONSIN					
EAU CLAIRE					
550940001 A01	0.013	0.0	0.0	0.0	*****
KENOSHA					
551540001 A01	0.013	0.017	0.011	0.017	0.014
MADISON					
551940001 A01	0.009	0.0	0.006	0.0	*****
MILWAUKEE					
552700001 A01	0.013	0.013	0.012	0.013	0.013
RACINE					
552880001 A01	0.008	0.008	0.0	0.009	0.007
SUPERIOR					
553460001 A01	0.013	0.013	0.0	0.020	0.012
WYOMING					
CASPER					
570170001 A01	0.0	0.0	0.009	0.0	*****
CHEYENNE					
570190001 A01	0.0	0.009	0.0	0.007	*****

Table 14-4. VANADIUM, NONURBAN QUARTERLY COMPOSITES AND YEARLY AVERAGES, 1969

($\mu g/m^3$)

LOCATION	1ST QTR.	2ND QTR.	3RD QTR.	4TH QTR.	YR. AVG.
ARIZONA					
GRAND CANYON NAT PI					
040190001 A03	0.0	0.0	0.0	0.0	*****
ARKANSAS					
MONTGOMERY CO					
041760001 A03	0.005	0.0	0.0	0.0	*****
CALIFORNIA					
HUMBOLDT CO					
060230001 A03	0.0	0.0	0.0	0.0	*****
FLORIDA					
HARDEE CO					
120490001 A03	0.004	0.0	0.005	0.005	0.004
IDAHO					
BUTTE CO					
160360001 A03	0.0	0.0	0.0	0.0	*****
INDIANA					
LAKE CO					
180890001 A03	0.006	0.005	0.0	0.006	0.004
PARKE CO					
183760001 A03	0.005	0.004	0.0	0.0	*****
MAINE					
ACADIA NAT PARK					
200210001 A03	0.018	0.019	0.024	0.010	0.018
MARYLAND					
CALVERT CO					
210240001 A03	0.043	0.035	0.035	0.026	0.034
MISSOURI					
SHANNON CO					
246430002 A03	0.0	0.0	0.0	0.0	*****
MONTANA					
GLACIER NAT PARK					
270570001 A03	0.0	0.0	0.0	0.0	*****
NEBRASKA					
THOMAS CO					
292490001 A03	0.0	0.0	0.0	0.0	*****
NEVADA					
WHITE PINE CO					
290560001 A03	0.0	0.0	0.0	0.0	*****
NEW HAMPSHIRE					
COOS CO					
300140001 A03	0.019	0.007	0.006	0.017	0.012
NEW YORK					
JEFFERSON CO					
330360001 A03	0.020	0.011	0.017	0.023	0.014

LOCATION	1ST QTR.	2ND QTR.	3RD QTR.	4TH QTR.	YR. AVG.
NORTH CAROLINA					
CAPE HATTERAS NAT					
340890001 A03	0.012	0.011	0.006	0.005	0.008
OKLAHOMA					
CHEROKEE CO					
370480001 A03	0.0	0.0	0.0	0.0	*****
OREGON					
CURRY CO					
380660001 A03	0.0	0.0	0.0	0.0	*****
PENNSYLVANIA					
CLARION CO					
391760301 A03	0.010	0.004	0.0	0.0	*****
RHODE ISLAND					
WASHINGTON CO					
410380002 A03	0.068	0.039	0.045	0.035	0.047
SOUTH CAROLINA					
RICHLAND CO					
421990001 A03	0.009	0.005	0.006	0.007	0.007
SOUTH DAKOTA					
BLACK HILLS NAT FO					
430110001 A03	0.0	0.0	0.004	0.0	*****
TENNESSEE					
CUMBERLAND CO					
440690001 A03	0.006	0.0	0.0	0.0	*****
TEXAS					
MATAGORDA CO					
483570001 A03	0.0	0.004	0.004	0.0	*****
VERMONT					
ORANGE CO					
470360001 A03	0.074	0.027	0.020	0.063	0.053
VIRGINIA					
SHENANDOAH NAT PAR					
482890001 A03	0.012	0.009	0.006	0.005	0.009
WYTHE CO					
483460001 A03	0.006	0.004	0.0	0.0	*****
WISCONSIN					
DOOR CO					
510780001 A03	0.0	0.004	0.0	0.0	*****
WYOMING					
YELLOWSTONE NAT PA					
520860001 A03	0.0	0.0	0.0	0.0	*****